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A STUDY OF THE PROCESSES, APPROACHES, AND FACTORS AFFECTING THE DECISION-MAKING STYLES OF EXPERIENCED PRINCIPALS IN ILL-STRUCTURED DECISION SITUATIONS

BY

JOHN JAMES TYMO
©

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND
RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

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The undersigned certify that they have read and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "A Study of the Processes, Approaches, and Factors Affecting the Decision-Making Styles of Experienced Principals in Ill-Structured Decision Situations" submitted by John James Tymo in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Date: May 15, 1995

Dedicated to Gladene, John, and Mary

whose encouragement and love

have seen me through when my strength waned,

and

To the memory of my parents, John and Mildred.

and the dreams they had for me.

Abstract

The primary objectives of this study were to determine, analyze, and interpret the processes used by experienced principals in resolving ill-structured decision situations. The study examined the personal characteristics of the principals and their illustrations of the ill-structured decision situations which they had encountered. The work also investigated what senior central office administrators regarded as examples of ill-structured decision situations, the characteristics of principals whom they believed were expert in resolving ill-structured decision situations, and the decision-making processes these principals used.

The qualitative research design of the study was based on an interpretive, inductive, theoretical orientation and utilized a multiple case study approach. Data was gathered primarily through the semi-structured interviewing of five principals and four central office administrators.

The findings indicated significant agreement between the data received from both groups of respondents. The experienced principals were confident in themselves and the support that they had from their superiors; were able to make decisions in ill-structured situations, were influenced by their personal values; and were people-oriented with good interpersonal skills. Ill-structured decision situations were described as those which involved irate parents, relationships with the community, and politically sensitive issues. The decision-making processes used by the experienced principals included: using past experiences; correctly understanding and interpreting situations; consulting with staff and/or peers; diffusing situations to prevent escalation; reflecting upon situations; and developing procedures and strategies to prevent ill-structured decision situations from occurring. A supportive relationship with their superiors enabled the principals to make decisions.

Ten grounded speculations resulted. Experienced principals use past experience to interpret and resolve ill-structured decision situations; use perceptions developed from experiences in diagnosing emerging situations; use their cognitive and experiential resources to define problems; are influenced by character and personality traits in their decision making; reflect on their actions and behaviours; use metacognitive processes; use critical thinking styles; make decisions in keeping with their personality types; and utilize a decision-making style influenced by the management style of the area superintendent.

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Table of Contents

Chapter 1 Overview of the Study **1**
Introduction 1
Objectives of the Study 5
Questions Guiding the Study 6
Significance of the Study 6
Assumptions 8
Delimitations 8
Limitations 9
Definition of Terms 9
Ill-Structured Decision Situation 9
Ill-Structured Decision 10
Experienced or Expert Principal 10
Tacit Knowledge 10

Chapter 2 Literature Review **11**
Decision Making 11
Classification of Decision Situations 12
The Relationship Between Problem Solving and Decision Making 12
The Process Of Making Decisions 13
Creativity in Decision Making 15
Nature of Expertise 16
Metacognition 17

Chapter 3 Methodology **19**
Introduction 20
Theoretical Orientation 20
Qualitative Research 22
Case Study Research Strategy 23
Data Collection 25
Interviews 25
Observations 26
Data Analysis 27
Tests of Rigor 28
Credibility 28
Transferability 29
Auditability 29

Confirmability 30
Ethical Considerations 30

Chapter 4 Case Studies: The Principals 30
Case Study — Principal A 30
Personal Characteristics 32
Ill-Structured Decision Situations 35
The Process of Making a Decision 37
Relationship With Area Superintendent 43
Summary 45
Case Study — Principal B 47
Personal Characteristics 49
Ill-Structured Decision Situations 50
The Process of Making a Decision 52
Relationship With Area Superintendent 60
Summary 60
Case Study: Principal C 62
Personal Characteristics 62
Ill-Structured Decision Situations 65
The Process of Making A Decision 67
Relationship With Area Superintendent 74
Summary 75
Case Study: Principal D 76
Personal Characteristics 77
Ill-Structured Decision Situations 80
The Process of Making a Decision 82
Relationship With Area Superintendent 89
Summary 90
Case Study: Principal E 92
Personal Characteristics 93
Ill-Structured Decision Situations 99
The Process of Making A Decision 102
Relationship With Area Superintendent 107
Summary 109

Chapter 5 Case Studies: Senior School District Administrators 111
Case Study Area Superintendent F 112
Principals Who Are Good Decision Makers 112
Characteristics of Principals Who Are Good Decision Makers 113

The Decision-Making Processes Used By Principals 116
The Ill-Structured Decision Situation 120
The Area Superintendent's Perspective 121
Summary 123
Case Study Area Superintendent G 124
Principals Who Are Good Decision Makers 124
Characteristics of Principals Who Are Good Decision Makers 124
The Decision-Making Process Used By Principals 125
The Ill-Structured Decision Situation 127
The Area Superintendent's Perspective 128
The Relationship Between the Area Superintendent and Principals 129
The Selection of Principals 130
Improving the Decision-Making Capabilities of Principals 131
Summary 132
Case Study Area Superintendent H 132
Principals Who Are Good Decision Makers 133
Characteristics of Principals Who Are Good Decision Makers 133
The Decision-Making Process Used By Principals 135
The Ill-Structured Decision Situation 136
The Area Superintendent's Perspective 137
Summary 138
Case Study — The Superintendent 140
Principals Who Are Good Decision Makers 140
Characteristics of Principals Who Are Good Decision Makers 140
The Decision-Making Process Used By Principals 142
The Ill-Structured Decision Situation 143
The Superintendent's Perspective 144
Summary 145

Chapter 6 Findings of the Study 148
Overview of the Study 148
Objectives 148
Theoretical Orientation 149
Research Design and Methodology 149
Findings: Principal Case Studies 150
Personal Characteristics 151
Ill-Structured Decision Situations 153
Process of Making a Decision 155

Relationship with the Area Superintendent 160
Findings: Superintendent Case Studies 163
Identification of Principals Who Were Good Decision Makers 163
Characteristics of Principals Who Were Good Decision Makers 163
The Principal's Decision-Making Processes 166
Ill-Structured Decision Situations 169
The Respondent's Perspectives 170
A Comparison of the Findings from the Case Studies of the Principals and the Area Superintendents/Superintendents 172
The Characteristics of the Principals 172
Ill-Structured Decision Situations 176
The Decision-Making Process 179
The Respondents' Perspective 183

Chapter 7 Speculations , Recommendations, and Concluding Remarks 186
Speculations 186
Recommendations 217
Recommendations for Further Research and Theory Development 218
Recommendations for Practice 222
Concluding Remarks 227

References 229

Appendix A 235

Appendix B 237

List of Tables

Table 1	Type and Frequency of Self Reported Personal Characteristics	152
Table 2	Types and Frequencies of PrincipalRelated Ill-structured Decision Situations	153
Table 3	Types and Frequencies of Principal Reported Processes used in Decision Making	155
Table 4	Types and Frequencies of Principal-Reported Comments Regarding The Relationship Between the Principal and Area Superintendent (AS).	161
Table 5	Characteristics of Principals Who are Good Decisions Makers as Identified by the Area Superintendents (F, G, H) and the Superintendent (S)	164
Table 6	Decision-making Processes Used by Principals Who Were Identified as Good Decision Makers as Reported by the Area Superintendent and the Superintendents	166
Table 7	Decision Situations Which Principal May Find to be Ill-structured as Identified by the Area Superintendents (F, G, H, I) and the Superintendent (I)	169
Table 8	The Perspectives of the Area Superintendents (F, G, H) and the Superintendent (I) Regarding Principals and Decision-Making.	171

List of Figures

Figure 1	Core thinking skills	201
Figure 2	Characteristics frequently associated with each type	212
Figure 3a	Effects of preferences in work situations	213
Figure 3b	Effects of preferences in work situations	214
Figure 4	Meyers' questions to facilitate use of perception and judgement in decision-making situations	216

Chapter 1

OVERVIEW OF THE STUDY

Introduction

"Changing circumstances are contributing to a heightened awareness of the substance of educational decisions and of the process through which those decisions are made," (March & Milkos, 1983, p. 2). In the field of educational administration, there is particular interest in the processes and methods used by school principals in making decisions. Of equal interest is the contribution of the nature of the decision to the decision-making process. Some decisions are made within well-defined policy criteria or well-established experiential bases. Other decision situations, ill-structured decision situations, demand that the decision maker come to a conclusion without the benefit of strict guidelines or multiple similar experiences. Therefore educational research into identifying, understanding, and resolving continually emerging ill-structured decision situations is of particular importance. The purpose of the present study is to examine the processes used by experienced principals in making decisions in ill-structured decision situations and to learn more about the characteristics of this group of decision makers. We "still need information concerning the strategies that people use in deciding how to represent and solve a problem" (Mayer, 1992, p. 224).

School principals use a variety of administrative processes as they perform the many duties associated with their positions. Various configurations of these processes, as they relate to crucial administrative task areas, have been identified in administrative theory. For example, Sergiovanni (1987), in viewing administration as a set of processes or functions, indicated that "planning, organizing, leading, and controlling are four functions that theorists often mention" (p. 7). In amalgamating the

concepts of a number of researchers, Miklos (1980) developed a matrix which related each administrative process to each administrative task area. The task areas on the matrix include the following: school program, pupil personnel, staff personnel, community relations, physical facilities, and management. The administrative processes outlined in the Miklos matrix are planning, decision making, organizing, coordinating, communicating, influencing, and evaluating.

The theoretical conceptualizations of the relationship between administrative processes and task areas developed by scholars provide various lenses through which the principalship may be viewed and also provide a framework for the practitioner, the principal, to practice the principalship. Practise, itself, may be examined in terms of theoretical models. A theory of practice, according to Argyris and Schon (1974), "consists of a set of interrelated theories of action that specify for the situations of the practice the action that will, under the relevant assumptions, yield intended consequences" (p. 6). They further define a theory of action, to which they refer in defining theories of practice, as "a theory of deliberate human behavior, which is for the agent a theory of control but, which when attributed to the agent, also serves to explain or predict his behavior" (p. 6). This prediction may also become prescription. A theory of practice, which outlines the role and function of the principal, may becomes prescriptive in various ways. One such prescription is legislation.

In enacting a new School Act in 1988, Alberta Education, a department of the government of the Province of Alberta, formally enshrined in legislation, section 15, the roles and functions which the principal must perform. They include:

a. provide instructional leadership in the school;

b. ensure that the instruction provided by the teachers employed in the school is consistent with the courses of study and education programs prescribed, approved and authorized pursuant to this Act;

c. evaluate or provide for the evaluation of programs offered in the school;

d. direct the management of the school;

e. maintain order and discipline in the school and on the school grounds and during activities sponsored or approved by the board;

f. promote co-operation between the school and the community that it serves;

g. supervise the evaluation and advancement of students;

h. evaluate or provide for the evaluation of the teachers employed in the school;

i. subject to any applicable collective agreement and the principal's contract of employment, carry out those duties that are assigned to the principal by the board. (Alberta Education, 1988).

The School Act formally decrees the components of the principal's administrative process as providing, ensuring, evaluating, directing, maintaining, promoting, supervising, and carrying out within the task areas of school program, pupil personnel, staff personnel, community relations, and management.

In accepting responsibility for these roles and functions, the principal is confronted by various situations and occasions which call for decisions. Indeed the decision-making process is an integral component of all administrative processes. This relationship between decision making and administration is well documented in the literature. Simon (1960) stated that decision making is "... synonymous with management" (p. 1). Harrison (1987) described decision making as "... a generic process that is applicable to all forms of organized activity" (p. 6). Miller and Starr (1967) called it "... a root process" (p. vii), while Leigh (1983) viewed decision making as "... a multi-disciplinary activity, drawing on many fields of endeavor" (p. 3). Although decision making is not specifically discussed in the School Act, it is implicit within each of the components of the administrative process. The absence of a direct reference to decision making in the School Act may be the result of an inherent understanding of the pervasive importance of decision making in administration. Hoy and Miskel (1987)

confirm this importance by stating that "decision making is a major responsibility of all administrators" (p. 316).

The importance of both the process and products of decision making in the daily functioning of a school cannot be over estimated. Indeed, the level of effectiveness of a particular school may depend on the quality of the decisions made within that school. The quality of decisions, in turn, may be a function of the ability of the person traditionally responsible for making the majority of decisions; namely, the principal.

Although decision situations or decisions may range from the routine, programmable, or well-structured to the unique, non-programmable, or ill-structured, it is the ill-structured situation which presents the greatest challenge and difficulty for the decision maker. The domain of the ill-structured decision situation includes conditions of crisis, incomplete information, the lack of alternative solutions, and an uncertainty of the desired outcome. Ill-structured decisions involve reliance on judgement, creativity, heuristic problem-solving techniques, individual processing, and general problem-solving processes (Harrison, 1987; Simon, 1960).

Decision making, in ill-structured situations, may also be referred to as problem solving. Costello and Zalkind (1963) observed that "the terms 'decision-making' and 'problem-solving' are often used interchangeably" (p. 334). The relationship between problem solving and decision-making was described by MacCrimmon (1974) when he stated that "the terms 'problem solving' and 'judgement' imply many of the same thought processes as 'decision-making'" (p. 445). Consequently, good problem solvers may also be described as good decision makers. Since problem solving or decision making in ill-structured situations is an essential aspect of the administrative process, continuing research in this area is of recognized importance.

Initially, studies of decision making would require the identification and description of conditions which would create ill-structured situations. Various situations which may be identified as ill-structured are certainly present within schools. It is of primary interest to examine the special skills, expertise, and talents possessed by those individuals experienced in making decisions in ill-structured situations.

Objectives of the Study

The primary objectives of the study were to determine, analyze, and interpret the processes (cognitive and administrative) used by experienced elementary or junior-high school principals in resolving ill-structured decision situations. To that end, five experienced elementary and junior-high school principals were selected and interviewed. During the analysis and interpretation of the data, attention was given to investigating the possible use of tacit knowledge, intuition, judgment, and insight of each principal in making decisions. The study also examined the personality characteristics of the subjects as well as the characteristics of decision situations which the respondents had identified as ill-structured.

Since school principals are responsible to the senior central office administrators, the secondary objectives of the study focused on determining, analyzing, and interpreting the perceptions of senior central office administrators as to the processes (cognitive and administrative) used by those elementary and/or junior-high school principals whom they perceived as to having a high degree of expertise in making decisions under ill-structured decision situations. They were asked to comment on personality traits possessed by principals with such expertise. As well, they were asked to provide descriptions of situations which, in their opinion, would be ill-structured. One superintendent and three area superintendents were selected and interviewed.

Questions Guiding the Study

The fundamental question which directed or guided the study was: How do experienced principals make decisions in ill-structured decision situations? The supplemental questions also examined in the study included:

1. What personal or personality characteristics did the principals report in self-description?
2. What decision situations may be classified as ill-structured?
3. What processes, cognitive, logistical, and/or consultative, do these principals use in resolving ill-structured situations?
4. Does the relationship between the principal and the area superintendent affect the decision making processes used by the principal?

Significance of the Study

Investigating the decision making processes used by experienced principals in ill-structured decision situations has the potential of significantly contributing to the theory and practice of educational administration. Decision making is a process which is an integral part of every administrative process. Leithwood and Stager (1986) suggested that "the bulk of school administration theory would support an image of school administration as decision making" (p. 2).

Decision making is a process fundamental to administration. Probably the single most significant factor in decision making is the decision maker. To understand the decision maker, it is essential to understand the processes (cognitive and administrative) used in reaching a decision in situations which are ill-structured. Leigh (1983) believed that "the decision maker is the most important element in the decision-

making process and in some ways the least understood." Therefore it is very important to pursue research which will extend the understanding of how experienced or expert principals think and act in making decisions, especially the most difficult decisions. Leithwood and Stager (1986) supported this view when they stated that "what principals do depends upon what principals think" (p. 3).

Principals have the primary responsibility for decision making within most schools. Through investigating, describing, and interpreting how ill-structured decisions were made by experienced principals, greater knowledge and understanding of their strategies and cognitive processes was gained. This understanding may provide insights to guide the development of inservice programs as well as preservice clinical experiences which could, in turn, enhance the decision-making skills of present and future principals.

The study of decision making has the potential of increasing the understanding of the effect that the relationship between the principal and area superintendent has on the decision-making processes and procedures used by the principal. With such understanding, relationships between area superintendents and principals could be developed and structured to advance the decision-making abilities of principals.

Furthermore, the identification of decision situations which may be described as ill-structured may contribute to the development of a classification framework for decision situations. Such a framework may be subsequently used to develop inservice simulation activities which could potentially shape future practice (Argyris & Schon, 1974).

Assumptions

A number of inherent assumptions were made in conducting this study. They were:

1. In schools, ill-structured or difficult decision situations occur.
2. It is worthwhile to identify and describe decision situations which may be classified as ill-structured.
3. Principals have the responsibility to produce solutions to ill-structured situations.
4. Experienced principals are more likely to be expert in decision making than novice principals.
5. Experienced or expert principals use different processes in making ill-structured decisions than novice principals.
6. It is possible and worthwhile to identify, analyze, and interpret the personal characteristics, procedures, and cognitive processes used by experienced or expert principals in making decisions in ill-structured decision situations.

Delimitations

The study was delimited according to the following factors:

1. The study was confined to one school jurisdiction, a large urban school district.
2. The central office senior administrators to be interviewed were the superintendent, and three area superintendents.
3. The experienced or expert principals to be interviewed had at least ten years' experience as school-based administrators, with a minimum of seven years as principal.

4. The data collection is delimited to a single tape-recorded interview with each subject.

Limitations

This study was limited by a number of factors which included the following:

1. No universally accepted criterion was available to screen principals according to their decision-making abilities.
2. The use of individuals as information sources included the inherent limitation created by the possible incongruity between what the informants state that they do and what they actually do.
3. The study was limited by the use of a single researcher and by the possible confusions of meaning inherent in human communication by virtue of variance of viewpoints and perceptions.
4. The study was further limited by the absence of women from the sample.

Definition of Terms

For the purposes of this study, the following definitions or distinctions were used.

Ill-Structured Decision Situation

A decision situation is ill-structured when "there is no cut-and-dried method for handling the problem because it hasn't arisen before, or because it is so important that it deserves a custom-tailored treatment" (Simon, 1960, p. 6). The situation may also include the conditions of increasing uncertainty regarding the structure of the situation and/or courses of action, as well as conditions of conflict.

Ill-Structured Decision

An ill-structured decision is a decision which is made in an ill-structured situation.

Experienced or Expert Principal

Although there is no universally accepted criterion to identify expert principals, there is a strong possibility that in many cases expertness is related to level of experience. Mayer (1992) stated that "research on expertise suggests that expert problem solvers must acquire a great deal of domain-specific knowledge, a feat which requires many years of intensive experience" (p. 390). For the purposes of this study, experienced or expert principals will have at least 10 years of administrative experience, with a minimum of seven years' experience as principal.

Tacit Knowledge

Tacit knowledge refers to knowledge which is beyond the knowledge which is verbalized. Polanyi (1966) explained:

> Tacit knowing is shown to account (1) for valid knowledge of a problem, (2) for the scientist's capacity to pursue it, guided by his sense of approaching its solution, and (3) for a valid anticipation of the yet indeterminate implications of the discovery arrived at in the end.

Chapter 2

LITERATURE REVIEW

The process of decision making is an integral component of all the administrative processes used by a principal in the administration of a school. Administration, information processing, and cognitive theorists have developed a number of conceptualizations which describe the decision-making process.

Decision Making

Harrison (1987) viewed a decision-making event as "a moment, in an ongoing process of evaluating alternatives for meeting an objective, at which expectations about a particular course of action impel the decision maker to select that course of action most likely to result in attaining the objective" (p. 2). The decision maker uses a knowledge base to develop stated or tacit criteria which are used to evaluate the information and solution alternatives. MacCrimmon (1974) acknowledged this position when he defined decision making as "the processes involving both thought and action that culminate in an act of choice" (p. 445). The thought dimension involved the use or extension of the decision maker's knowledge base while the action dimension referred to resource acquisition, commitment, and implementation. According to Johns (1981), "decision making is the process of developing a commitment to some course of action" (p. 386). Conditions, within decision makers or their environment, stimulate the inauguration of the decision-making process.

Theorists of management science have identified four conditions which prompt decision making. The conditions are: (1) a gap exists between desired and existing states, (2) the gap is large enough to deserve attention, (3) motivation exists to reduce the gap, and (4) the ability is present to reduce the gap (MacCrimmon, 1974, Glueck, 1977, Leigh, 1983).

Classification of Decision Situations

MacCrimmon (1974) presented the idea of a continuum of decision situations or problems by citing Simon (1960) and Minsky (1961) as viewing well-structured or programmed problems and ill-structured or nonprogrammed problems as the "two endpoints on the continuum of decision problems" (p. 449). Harrison (1987) presented a similar continuum but referred to the endpoints as Category I and Category II types of decisions.

Well-structured decision situations are programmable, routine, and recurring. The procedures used to obtain these decisions are divided into three categories: "(a) habits, (b) clerical routines or standard operating procedures, and (c) organizational structures including common expectations, a system of subgoals, and well-defined information channels" (McNamara & Chisholm, 1988, p. 531).

At the other end of the continuum are ill-structured, ill-defined, or nonprogrammable decision situations which rely on judgment, intuition, and creativity. These decisions are made under conditions of increasing levels of uncertainty regarding pertinent information, the structure of the problem, alternative courses of action, and the objective to be achieved. "There is no cut-and-dried method for handling the problem because it hasn't arisen before, or because its precise nature and structure are elusive or complex, or because it is so important that it deserves a custom-tailored treatment" (Simon, 1960, p. 6).

The Relationship Between Problem Solving And Decision Making

Although Simon's (1960) continuum refers to a classification of problem situations, it is possible that problem solving and decision making are similar processes with a flexible relationship. Lang, Dittrich, and White (1978) identified and

cited support for three conceptualizations of the relationship. First, problem solving has been viewed as a broad process which includes decision making (Pound, 1953; Glueck, 1977). The opposite view has also been prevalent. In this second position, problem solving has been seen as a facet of decision making (Dill, Hilton, & Reitman, 1962; Maier, 1964). Finally, problem solving and decision making have been treated as synonymous processes, with the terms used interchangeably (Kast & Rosenzwieg, 1974; MacCrimmon & Taylor, 1976; Costello & Zalkind, 1963; Harrison, 1987).

McNamara and Chisholm (1988) believed that the processes of problem solving and decision making may be classified along the same continuum from programmable to nonprogrammable. However, since the characterization of problems as being routine and programmable lacks the dimensions of crisis, uncertainty, conflict, and immediacy which are usually associated or envisioned with the term "problem," one might question McNamara and Chisholm's position. Routine or nonprogrammable problems may be more appropriately referred to as decision situations. Decision making and problem solving are virtually identical processes under conditions which are ill-structured, nonprogrammed, innovative, and uncertain. Consequently, decision-making and problem-solving situations may be thought of as sharing the ill-structured pole of the continuum requiring similar processes. For the purposes of the present study, the terms "problem solving" and "decision making" are used synonomously as they apply to ill-structured situations.

The Process Of Making Decisions

Administrative and management theorists have presented a variety of descriptions of the processes of decision making and problem solving. Simon (1960) stated that "decision making comprises three principal phases: finding occasions for making decisions; finding possible courses of action; and choosing among courses of

action" (p. 1). Griffiths (1959) indicated that the decision-making process consisted of six steps: (1) recognize, define, and delimit the problem, (2) analyze and evaluate the problem, (3) develop criteria to evaluate solutions, (4) collect data, (5) formulate and select the preferred solution or solutions, and (6) implement the preferred solution. Glueck (1977) viewed the decision-making process as involving four overlapping and interactive stages which include recognition and definition of the problem, search for information and decision alternatives, choice among alternatives, and implementation of the decision. Harrison (1987) portrayed decision making as setting managerial objectives, searching for alternatives, comparing and evaluating alternatives, implementing the decision, and following-up and controlling the implementation of the decision. Leigh (1983) identified the simplest decision framework as a series of sequential steps which include finding an occasion for making a decision, finding possible causes for action, choosing among alternatives, and evaluating past choices.

Hoy and Miskel (1987) discuss the sequential steps and optimizing strategies of the classical decision-making model which is a distillation of the various rational decision configurations and models. The series of sequential steps of the classical model are: (1) a problem is identified, (2) goals and objectives are established, (3) all the possible alternatives are generated, (4) the consequences of each alternative are considered, (5) all the alternatives are evaluated in terms of the goals and objectives, (6) the best alternative is selected; that is, the one that maximizes the goals and objectives, and (7) the decision is implemented and evaluated. The rational procedures of the classical model may be used with decision situations which have almost complete certainty at the well-structured end of the continuum. As decision situations approach the ill-structured pole, weaknesses of the classical model are realized. "The classical model is an ideal rather than a description of how most decision makers function" (Hoy & Miskel, 1987, 317).

Frequently decision-making does not occur in isolation but may involve varying levels of participation of individuals affected by the decision. Vroom and Yetton (1973) were interested "specifically in leaders' choices about how much and in what way to involve their subordinates in decision-making" (p. 5). Without addressing the cognitive processes involved in decision-making, they described a variety of alternatives or social processes relating to the participation of subordinates in decision making. These alternatives were:

> You could make the decision by yourself and announce it to your subordinates; you could obtain additional information from your subordinates and then make the decision; you could consult with them individually or collectively before making the decision; or could convene them as a group, share the problem with them, and attempt to reach agreement on the solution to the problem. (Vroom and Yetton, 1973, p. 6)

Vroom and Jago (1988), presented another alternative, that "the leader delegate or empower the group to make the decision without the leader's presence" (p. 32). The level of participation within the decision-making process is related to the leadership or decision-making style of the individual with the responsibility for the decision. Vroom and Yetton (1973) suggest a sequence of questions which the decision maker could use "in diagnosing a particular problem before choosing his leadership method" (p. 30). These questions were:

A. If decision were accepted, would it make a difference which course of action were adopted?

B. Do I have sufficient information to make a high quality decision?

C. Do subordinates have sufficient additional information to result in a high quality decision?

D. Do I know exactly what information is needed, who possesses it, and how to collect it?

E. Is acceptance of decision by subordinates critical to effective implementation?

F. If I were to make the decision myself, is it certain that it would be accepted by my subordinates?

G. Can subordinates be trusted to base solutions on organizational considerations?

H. Is conflict among subordinates likely in preferred solutions? (Vroom and Yetton, p. 31)

By giving a yes or no responsed to each question in the sequence, the decision maker develops a decision tree which provides information regarding the extent to which subordinates should particiate in the decision-making process.

Creativity in Decision Making

The need for creativity in decision making becomes an issue when the decision situation is ill-structured. Van Gundy (1984) defined "creativity as a problem-solving process that involves bringing something new into existence" (p. 6). Newell, Shaw, and Simon (1962) identified conditions which needed to be satisfied for problem solving to be creative. The conditions included:

1. The product of the thinking has novelty and value (either for the thinker or for his culture).
2. The thinking is unconventional in the sense that it requires modification or rejection of previously accepted ideas.
3. The thinking requires high motivation and persistence, taking place either over a considerable span of time (continuously or intermittently) or at high intensity.
4. The problem as initially posed was vague and ill-defined, so that part of the task was to formulate the problem.(p. 65)

In order to develop new and creative solutions, adjustments may need to be made in the manner in which decision problems are structured and in the thought processes used to identify and evaluate alternative solutions. Awareness of previous presentation of decision problems, solutions, and the thought processes which led to those solutions provides a foundation from which the creative process may begin.

Nature of Expertise

Experience and the knowledge gained from that experience is considered to be a significant component in the development of expertise. Mayer (1992) discussed four classes of knowledge which may differ in experts and novices. These classes were factual or syntactic knowledge, semantic knowledge, schematic knowledge, and strategic knowledge. The first, factual or syntactic knowledge, was described as basic knowledge, which in this case would be knowledge of education, administration, decision making, human relations, and the decision situation. The second, semantic knowledge, was the knowledge of the concepts which underlie the problem situation. The third, schematic knowledge, was the knowledge of problem types. Finally, strategic knowledge was the knowledge of strategies for generating and monitoring plans.

Chi, Glaser, and Rees (1982) determined that "the problem-solving difficulties of novices can be attributed to inadequacies of their knowledge bases and not to limitations in the architecture of their cognitive systems or processing capabilities" (p. 71). Novices or those functioning as novices usually do not possess the same level of knowledge as the expert. According to Mayer (1992), "problem solving in a domain depends heavily on the quality and quantity of the problem solver's domain-specific knowledge" (p. 413). Experts usually possess a large quantity of high-quality domain-specific knowledge.

Glaser and Chi (1988) summarized the research findings regarding expert performance across various domains. These findings included:

1. Experts excel mainly in their own domains.
    - The obvious reason for the excellence of experts is that they have a good deal of domain knowledge.
2. Experts perceive large meaningful patterns in their domain.
    - It reflects an organization of the knowledge base.

3. Experts are fast; they are faster than novices at performing the skills of their domain, and they quickly solve problems with little error.

    - Although studies in the literature actually find experts slower than novices in the initial phases of problem solving, experts solve problems faster overall.

    - A further possible explanation for experts' speed in solving problems rests on the idea emphasized earlier that experts can often arrive at a solution without conducting extensive search.

4. Experts have superior short-term and long-term memory.

    - This is not because their short-term memory is larger than other humans' but because the automaticity of many portions of their skills frees up resources for greater storage.

5. Experts see and represent a problem in their domain at a deeper (more principled) level than novices; novices tend to represent a problem at a superficial level.

    - These results indicate that both experts and novices have conceptual categories, but that the experts' categories are semantically or principle-based, whereas the categories of the novices are syntactically or surface-feature oriented.

6. Experts spend a great deal of time analyzing a problem qualitatively.

    - Protocols show that, at the beginning of a problem-solving episode, experts typically try to "understand" a problem, whereas novices plunge immediately into attempting to apply equations and to solve for an unknown.

7. Experts have strong self-monitoring skills.

    - The superior monitoring skills and self-knowledge of experts reflect their greater domain knowledge as well as a different representation of the knowledge. (Glaser & Chi, pp. xvii-xx)

There may be a distinction between the knowledge possessed by the novice who has little experience and the knowledge of an expert who has extensive experience.

Metacognition

"Metacognition refers to cognitions about cognitions or the executive decision-making process in which the individual must both carry out cognitive operations and

oversee his or her progress," (Meichenbaum, Burland, Gruson, & Cameron, 1985, p. 5). The metacognitive activities summarized by Brown (1978) showed similarities to decision-making paradigms. These metacognitive activities included:

1. analyzing and characterizing the problem at hand;
2. reflecting upon what one knows or does not know that may be necessary for a solution;
3. devising a plan for attacking the problem; and
4. checking or monitoring progress.

She further summarized these activities within two categories: the first was reflection activities where one reflects upon one's cognitive abilities, and the second was self regulatory activities where one used these activities while attempting to learn or solve problems. Meichenbaum, Burland, Gruson, and Cameron (1985) described these metacognitive activities as "two classes of cognitive activities: the first is one's awareness of domain-specific knowledge, especially about one's own cognitive processes; the second involves content-free strategies or procedural knowledge such as self-interrogation skills, self checking, and so forth" (p. 5). A relationship may exist between the frequency, depth, and skill in metacognitive activities and the increase in expertise in decision-making within ill-structured decision situations.

Research within various domains designed to understand and interpret expertness is expanding. Glaser and Chi (1988) recommended that this trend needed to be continued, if not expanded. They stated that:

> We must better understand the properties of domain structure and integrated knowledge; the mechanisms of problem-space definition with minimal search through rapid pattern recognition; and the processes involved in redefining the space of ill-structured and difficult problems. To do so, we should investigate the forms of reasoning and problem-solving strategies that structured knowledge facilitates. We also need to understand how expertise is acquired, how it can be taught, and how beginning learners can be presented with appropriate experience. (p. xxi)

Chapter 3

METHODOLOGY

Introduction

The research design used in this study was based upon an interpretive, inductive theoretical orientation. A qualitative research methodology was selected as an approach consistent with this theoretical orientation. Within this context, the multiple case research strategy was used.

Theoretical Orientation

Bogdan and Biklen (1982) maintained that, "whether stated of not, all research is guided by some theoretical orientation" (p. 30). Of the four sociological paradigms, the functionalist, interpretive, radical humanist, and radical structuralist, presented by Burrell and Morgan (1979), the interpretive paradigm provided the theoretical orientation for this study. The subjectivist orientation of the interpretative paradigm has been described by Burrell and Morgan (1979) as viewing "the social world as an emergent social process which is created by the individuals concerned" (p. 28). Berg (1989) confirmed this view when he stated: "What humans say and do are the result of how they interpret their social world . . . human behavior depends on learning . . . human beings communicate what they learn through symbols, the most common system of symbols being language" (p. 7). Therefore, the view of reality, that human beings possess and communicate, results from their interpretation of the interactions with events, people, situations, processes, and phenomena. Merriam (1988) declared that "reality is not an objective entity; rather, there are multiple interpretations of reality" (p. 39). According to Psathas (1973), as quoted in Bogdan and Biklin (1982), researchers need to learn from

their subjects "what *they* are experiencing, how *they* interpret their experiences, and how *they* themselves structure the social world in which they live" (p. 30).

Interpretation is the act or process of finding meaning, significance, and/or explanation in reaching understanding. Interpretation provides meaning and consequently understanding of the individual's reality as well as the processes which comprise that personal reality. "The meaning people give to their experience and their process of interpretation is essential and constitutive, not accidental or secondary to what the experience is" (Bogdan & Biklin, 1982, p. 33). To understand the processes and strategies that a person--the experienced school principal, for example--used in certain life processes or, more specifically, in the administrative process of decision making requires awareness and exploration of the interpretive processes that he or she use in developing skills. Geetz (1973) suggested that it was important to understand the meaning of events and processes according to the conceptual domain of the subjects, since each subject had an individual and distinctive way of interpreting experiences with the meaning those experiences constituting their reality (Greene, 1978). This view was supported by Giorgi (1971) when he stated that "by analyzing meaning, the significance and relevance of an experience for the whole person becomes intelligible" (p. 10). Consequently, in interpreting the meaning of an experience, process, or phenomenon, such as decision making, understanding of the significance and relevance of the experience for the decision maker may be achieved. If the decision maker exhibits great expertise in fulfilling the phenomenon, then such understanding may be transferable and beneficial to others who are required to perform the same phenomenon. Merriam (1988) believed "that research focused on discovery, insight, and understanding from the perspectives of those being studied offers the greatest promise of making significant contributions to the knowledge base and practice of education" (p. 3).

Qualitative Research

In accepting the theoretical orientation of the interpretative paradigm, it was logical to use qualitative research methods for this study. Berg (1989) believed that "qualitative techniques allow the researcher to share in the understandings and perceptions of others and to explore how people structure and give meaning to their daily lives" (p. 6). Bogdan and Biklen (1982) stated that "in education, qualitative research is frequently called naturalistic because the researcher hangs around where the events he or she is interested in naturally occur" (p.3). Although qualitative and naturalistic are at times treated synonymously in describing a research methodology, there is a distinction in their meaning.

In describing qualitative inquiry, Owens (1987) states that it "seeks to understand human behavior and human experience from the actor's own frame of reference, not the frame of reference of the investigator" (p. 181). Owens (1987) believed this differed from naturalistic inquiry, which refers to ways one seeks to examine reality, in situ, in its natural environment. Consequently, naturalistic inquiry may be described as research which relies on qualitative methods. The qualitative characteristics of naturalistic research suggested by Guba and Lincoln (1981, pp. 39-43) include: natural settings, humans as primary data-gathering instruments, use of tacit knowledge, qualitative methods, purposive sampling, inductive data analysis, grounded theory, emergent design, negotiated outcomes, case-study reporting mode, ideographic interpretation, tentative application of findings, focus-determined boundaries, and special criteria for trustworthiness. These characteristics were included within the five features of qualitative research enumerated by Bogdan and Biklen (1982, pp. 27-29).

The features are:

1. Qualitative research has the natural setting as the direct source of data, and the researcher is the key instrument.
2. Qualitative research is descriptive.
3. Qualitative researchers are concerned with process rather than simply with outcomes or products.
4. Qualitative researchers tend to analyze their data inductively.
5. "Meaning" is of essential concern to the qualitative approach.

In the present study, the research strategy used in searching for questions and understanding within the interpretive theoretical orientation using qualitative approaches was the case study.

Case Study Research Strategy

"Case study research, and in particular qualitative case study, is an ideal design for understanding and interpreting observations of educational phenomena" (Merriam, 1988, p. 2). The qualitative case study may be an ideal strategy to determine, analyze, and interpret the personal characteristics, procedures, and cognitive processes used by experienced or expert principals. Merriam (1988) suggested that "investigators use a case study design in order to gain an in-depth understanding of the situation and its meaning for those involved" (p. xii). In fact, Yin (1984) related the case study process to the study of decision making by quoting Schramm (1971) in saying, "The essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result" (p. 22).

There are various types of case studies used within various research domains. In providing a general definition for case study research, Bogdan and Biklen (1982) stated

that "a case study is a detailed examination of one setting or one single subject, or one single depository of documents, or one particular event" (p. 58). Yin (1984) extended this definition by asserting that "a case study is an empirical inquiry that: investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (p. 23). Merriam (1988) believed that case study research can be "defined by its special features" or "essential properties" which for the qualitative case study are: "particularistic, descriptive, heuristic, and inductive," which are explained as:

> *Particularistic* means that the case study focuses on a particular situation, event, program, or phenomenon. The case itself is important for what it reveals about the phenomenon and for what it might represent.
>
> *Descriptive* means that the end product of a case study is a rich, "thick" description of the phenomenon under study. *Thick description* is a term from anthropology and means the complete, literal description of the incident or entity being investigated.
>
> *Heuristic* means that case studies illuminate the reader's understanding of the phenomenon under study. They can bring about the discovery of new meaning, extend the reader's experience, or confirm what is already known.
>
> *Inductive* means that, for the most part, case studies rely on inductive reasoning. Generalizations, concepts, or hypotheses emerge from an examination of the data--data grounded in the context itself. . . . Discovery of new relationships, concepts, and understanding, rather than verification or predetermined hypotheses, characterizes qualitative case studies. (pp. 11-13)

The present study certainly mirrored the essential properties of the qualitative case study as presented by Merriam (1988). The descriptive nature of the study was also consistent with Guba and Lincoln's (1981) connotation of description as including "interpreting the meaning of" (p. 119) the information.

The particularistic property of a qualitative case study was achieved within the study by focusing on the phenomenon of decision making within a particular situation, the ill-structured decision situation. The descriptive property was achieved by asking the principals who were interviewed to describe their personal characteristics, decision situations which are ill-structured, and the procedures and cognitive processes that they use to arrive at decisions. The heuristic property of case study research had relevance to the formulations of the outcomes and speculations generated by the study. Stake (1981) explained that "previously unknown relationships and variables can be expected to emerge from case studies leading to a rethinking of the phenomenon being studied. Insights into how things get to be the way they are can be expected to result from case studies" (p. 47). The inductive property of case studies was achieved in this study through interpretation and the discovery of new understanding of how experienced or expert principals make decisions in ill-structured decision situations. Case study research not only gives the potential to expand understanding of the particular practice and the decision making of experienced or expert principals in ill-structured decision situations, but it also reveals questions which will guide future research. Merriam (1988) stated:

> Anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon. It offers insights and illuminates meaning that expand its reader's experience. These insights can be construed as tentative hypotheses that help structure future research, hence case study plays an important role in advancing a field's knowledge. (p. 32)

The study used a multiple case study approach. Yin (1984) outlined this approach by stating "In each situation, an individual person is the case being studied, and the individual is the primary unit of analysis. Information about each relevant individual would be collected, and several such individuals or "cases" might be included in a multiple-case study" (p. 31). Consequently, in one part of the study, the units of analysis

were the experienced or expert principals, while the area superintendents and the superintendent were the units of analysis in the second part of the study.

Data Collection

In each case study, of the present research, the data was primarily collected by interview and augmented by observation. Authorization to conduct the interviews with the senior central office administrators and the experienced principals was obtained through the office of the Superintendent of Schools. A member of the superintendent's staff provided the names of the experienced principals who showed interest in participating in this study. The sample also represented diverse areas of the city providing varying educational programs. The researcher reached the perspective respondents by telephone to arrange appointment times for the interview.

Interviews

In describing qualitative case study research, Merriam (1988) indicates that "the researcher wants to find out what is 'in and on someone else's mind'" (p 72). According to Patton (1980), as quoted in Merriam (1988), "we interview people to find out from them those things we cannot directly observe . . . . We cannot observe feelings, thoughts, and intentions. We cannot observe behaviors that took place at some previous point in time" (p. 72). The interview provides researchers with the opportunity to stimulate the respondent to introspectively review and discuss the actions and cognitive processes that they used within the context of the proposed research objectives. In fact, Elstein, Shulman, and Sprafka (1978) believed that "methodologically, information-processing research generally relies on introspective reports to determine the thought processes, heuristics, symbolic manipulations, or decision rules needed to solve a particular

problem" (p. 21). Consequently, qualitative case study research, using interview techniques, would be appropriate when "the researcher wants to find out what is in and on someone else's mind" (Merriam, 1988, p. 72).

In this study, a semi-structured interview protocol was used. Semi-structured interviews "are guided by a list of questions or issues to be explored, but neither the exact wording nor the order of the questions is determined ahead of time" (Merriam, 1988, p. 74). Although the research questions provided the basis for the interviews, the interviews included an "open-ended" (Yin, 1984, p. 83) quality, enabling the researcher and respondents to explore issues which evolved during the course of the interview.

The interviews were conducted in an informal manner, enabling the researcher to develop a rapport with the respondents. With the exception of one respondent, the interviews took place in the respondents' offices during working hours. However, one principal was interviewed on Saturday morning in the staff room of the school. All the respondents gave their approval to the taping of the interviews and the subsequent professional transcription of the interview tapes. The respondents were sent a copy of their transcriptions and were asked to clarify, expand, or amend the portions of the transcript which were inconsistent with the meaning which they wished to convey.

Observations

The data obtained from the interviews were supplemented by observations made by the researcher. The observations were of the deportment, mannerisms, and reactions of each respondent during telephone conversations and the interview. Observations were also made of the manner in which they had structured their environments. These observations were limited to the time of the interview and immediately prior to and after the interview.

Data Analysis

Initially, the transcriptions of the interviews were read by the researcher to obtain an overview of the data. The transcriptions were reread and the interviewee's pertinent responses were highlighted with one colour while the researcher's questions were highlighted with another colour. The transcriptions were reread to identify information categories which related to the questions and objectives of the study as well as to elicit any other topics of relevant interest which developed during the course of the interviews. The transcriptions were read over once more to code the data which related to each of the categories by placing number codes in the right margin of the transcripts. Statements from the established categories were subsequently assembled into main themes which related to the research questions and possible other emergent themes. Prior to analyzing each of the themes, appropriate sections of the transcriptions were tabbed to facilitate physical searches.

In each case study, the analysis of the interview data involved numerous interpretive readings of selected segments of the transcript which concerned particular themes. The object of the analysis, within the theoretical orientation of the study, was to identify and interpret the subjects' understanding of their experiences regarding the resolution of ill-structured decision situations.

Tests of Rigor

With naturalistic research, there is a concern about the trustworthiness of the obtained data and the appropriateness of the interpretation of that data. Guba and Lincoln (1981) presented four criteria in naturalistic research for establishing trustworthiness of the data; namely, credibility, transferability, auditability, and confirmability.

Credibility

According to Guba and Lincoln (1981), credibility, also referred to as truth value or internal validity, is the "degree of isomorphism between the study data and the phenomena to which they relate" (pp. 104-105). The researcher endeavored to develop a rapport with the respondents which enabled them to candidly and truthfully share information regarding their actions and cognitive processes. Member checks and peer examination, two of Merriam's (1988) four strategies to ensure credibility, were also used. According to Guba and Lincoln (1985), member checks can have both a formal and informal nature occurring throughout a naturalistic study. In the present study, member checks were sought during the interviews, with the researcher rephrasing the respondents' comments to seek confirmation of the intended meaning of what was said. The respondents' were also requested to review the transcriptions of their interviews to clarify and expand any portion which did not accurately convey their intended meaning. Peer examination was completed by colleagues and members of the supervisory committee to review the findings.

Transferability

Guba and Lincoln (1981) viewed fittingness as a naturalistic term referring to applicability, external validity, or generalizability which encompasses the idea of transferability. Transferability was assessed by reviewing the level of inter-case study similarity in the obtained data. The proposed study may have significant transferability if the interpretation of the data results in inductive conclusions.

Auditability

Guba and Lincoln (1981) used the term auditability in naturalistic research in discussing the concepts of consistency and reliability. The researcher followed the

advice given by Merriam (1988) when she stated: "In order for an audit to take place, the investigator must describe in detail how categories were derived, and how decisions were made throughout the inquiry" (p. 172).

Confirmability

Confirmability, also known as neutrality or objectivity, is a concept which "shifts the burden of proof from the investigator to the information itself" (Guba & Lincoln, 1981, p. 126). The researcher attempted to maintain objectivity throughout the study and "report his data in such a way that it can [could] be confirmed from other sources if necessary" (Guba and Lincoln, 1981, p. 126).

Ethical Considerations

The proposed study was undertaken under the ethical guidelines instituted by the University of Alberta General Faculties Council and by the Department of Educational Administration. Consent to conduct the proposed research was obtained from the appropriate authorities. The respondents who took part in the study did so on a voluntary basis. Particular attention was directed toward maintaining confidentiality and the anonymity of the individuals, schools, and school districts involved in the study.

Chapter 4

CASE STUDIES: THE PRINCIPALS

The main purpose of this chapter is to interpret and understand the reflections and representations of each of the experienced school principals presented in the five case studies. Each case study begins by focusing upon the respondent's perceptions of their own personal characteristics and attitudes which could influence their decision making in situations which are ill-structured. Since the structure of decision situations for individuals may vary with their different experiential backgrounds, the case studies then focus upon the examples of decision situations which the respondents characterize as ill-structured. Attention is then centered upon the primary objective of the study, the decision-making processes used by experienced school principals in resolving decision situations which are ill-structured. Finally, in each case study the relationship between the principal and the area superintendent is explored. Since the principal is directly responsible to the area superintendent, the perceived relationship between them may affect the principal's decision-making style. The hermeneutic undertaking, the search for meaning, in each case study is to determine how each respondent interprets and structures his world and his experiences within the context of their decision-making processes.

Case Study — Principal A

Principal A was the first principal to be interviewed. The one-and-a-half hour interview took place in the staff room at the school on a Saturday morning. The staff room was the epitome of organization and order, as demonstrated by the bulletin boards which contained notices in a regular vertical fashion without overlap or mess. Books, various materials, and equipment were arranged in an orderly fashion.

The Saturday morning meeting was suggested by the principal to enable a uninterrupted time for the interview. He arrived attired in a tie, sport jacket, slacks, and well-polished shoes. His clothing was far different than the more casual dress which the researcher had expected for a Saturday morning. Throughout the interview, he responded candidly and eagerly to the questions, providing lengthy answers, relating examples, and stating opinions which gave insight into his personal characteristics and philosophy.

The principal stated that, prior to entering teaching, he had a "background of working with the federal government on some tremendously good programs up in the Arctic as well as through Alberta, and then I got into the air force as an officer with the air force." He believed that this background had given him "a real sense of accomplishment" and "an opportunity to become a leader and an effective decision maker through the same process." He disclosed that he says to himself, "Just look at the air force: if you are an officer, you look after your people; in education it shouldn't be any different." It is this background and attitude which the respondent brought to this particular school in which he had held the principalship for seven years. This was the fifth school in which he had held an administrative position.

The school, approximately thirty to forty years old, was situated in a mature part of a large Alberta city. It was the only school in the district to deliver an immersion junior high school program dedicated to a specific language other than French along with a regular English program. The school had a student population of 234 students, with 13.4 teachers. The principal stated that the majority of the students came "from all over the city" and that he "didn't have a community of parents around him." The respondent also mentioned that he had "only one feeder school and this year I'm only getting sixteen students from that feeder school."

The uniqueness of the junior high school immersion program had resulted in "visits from people from Saskatchewan Education, Manitoba Education, Vegreville—all over the province so to speak—who want to know how did this program come on stream?" The uniqueness of the program made it a necessity for students to specifically select the program and the school. The respondent emphasized that "we are unique, and maybe that possibly may impact on your study, because it isn't an average type or normal type of junior high, simply on the basis that most of our students come here because they want to." To maintain enrollment, "We recognize that our students are our biggest marketers," the respondent stated.

Notwithstanding this position, at the school there was a continual possibility of a significant drop in enrollment and possible school closure. The school had been named for closure, and it was "mystifying to a lot of us why that would be the case, obviously political in nature," observed the principal. The school was scheduled to lose four teachers the following year. The principal also revealed that the imminent staff reductions had not made the staff excessively nervous since "they have a feeling that things will work out, because they always do." According to the respondent, the staff "have an awful lot of confidence in the administration of this school, that we will keep things together and keep them as harmonious as ever." The principal was pleased with the work performed by his staff and himself. He stressed that "we do care, it's obvious; the teachers enjoy it here, it's obvious; the students enjoy coming here, it's obvious; and our parents are very supportive of this school."

Personal Characteristics

Throughout the interview, the respondent alluded to characteristics which he possesses or should possess to be a leader as well as an effective principal and decision maker. For example, he stated that he had to be "a person who can negotiate with

people, and, in order to be a good negotiator, I have to have good interpersonal skills." He also had "to be flexible . . . to be able to not only nurture our staffs but also to help them." The ability to understand human behavior is essential to help or nurture. "Another thing about being a good leader . . . you've got to know people, period," the respondent emphasized. Staff members, students, parents, peers, and superiors were all mentioned within the respondent's references to people. He was direct in explaining how his knowledge of people helped him. For example, the respondent disclosed that "if a person comes into the school and wants to talk to me about a problem, I can sense whether this person is angry or whether he just needs to sit down and have a cup of tea with me before we can get into things."

The respondent was also prepared to "accept new challenges," communicate beyond the school with the community, take risks, be fair, seek consultation from staff, and learn and grow in the job. He had "no trouble at all delegating." He understood the importance of professional literature and sought to promote the growth of others by providing such literature to staff members. He advocated a positive attitude toward students when he stated that "on this staff we don't talk against the children negatively." The respondent felt "confident and competent in his job" and believed that others have confidence in you because of "your personality, the way in which you conduct yourself."

Furthermore, the respondent revealed satisfaction in his ability to remain calm and not yell or become angry. On the rare occasion that he did raise his voice with a student, he was able to apologize and ask forgiveness. In regard to adults, or specifically parents, his motivation was to avoid anger since "eventually everybody comes to recognize the fact that the guy didn't get angry. Because you know yourself, Jim, one day you may hire me; I don't know. But the fact of the matter is that that parent has every right to phone my boss to say, 'Why do you have a guy like that in the school? He gets

angry at me, and I get angry at him; that doesn't help anybody.'" He was of the opinion that his background and level or interpersonal skills enabled him to exhibit sufficient control to remain calm under conditions in which the staff or himself may feel threatened. Principal A disclosed that "some of my peers seem to think that because they've reached the honorable stage of being called a principal that that makes them invincible. No, it's the furthest thing from the truth." His confidence was tempered with the knowledge that the possibility of improvement continually exists.

Without hesitation and with great ease, the respondent provided insights into his own personal characteristics and philosophy. He portrayed a picture of a confident person who knew where he had been, where he was, and where he was going. He emphasized the importance of his background of successful non-educational experiences in preparing him to be a successful principal. Among the revealed characteristics, fairness and good interpersonal skills were stressed. He exuded an image governed by order and proper conduct, which might have been the product of his military training and service. He was confident in his ability as principal, and believed that others shared this confidence. These characteristics formed the foundation of the perspective from which he identified decision situations which were ill-structured.

Ill-Structured Decision Situations

The researcher reviewed the relationship between decision making and problem solving, and discussed the conceptualization of a continuum of decision situations from the well-structured to the ill-structured. The researcher described the ill-structured decision situations as "those that may not have presented themselves before, that are quite unique, that may require a creative decision, innovative decision, that are quite judgmental." The respondent was requested to reflect back on his experiences to recall decision situations which may be described as ill-structured. The respondent

suggested that what the researcher may think was "an ill-conceived situation or is a problem" may not be so considered by the respondent.

The respondent expressed that "one of the things that concerns me is the relationship that we have with students" and "in order to maintain a good balance in the school, so that the number of problems or incidents or concerns are minimized, we have, in fact, prepared a very attractive handbook for the students" called the "Student Handbook." This handbook contained simple statements of policy and expectations such as, "You have the right to be in this school, but with it comes certain responsibilities." These policy statements also appeared in every classroom. The respondent believed that the "students owned the handbook and the contents thereof." Because of his proactive process of addressing situations before they become a problem, as exemplified by the Student Handbook, the number of ill-structured decision situations he had to face were minimal. He said, "I don't have the kind of problems that are overwhelming to the point that I wonder, 'how am I going to handle this one'?"

To elicit further potential examples of ill-structured decision situations, the researcher rephrased the question to "What decision situations do you find are the ones that are more difficult to deal with than others?" The respondent related that "one of the things that is always difficult is when you feel that the child is being abused." He described abuse as in the sense that "youngsters who have to stay up long hours because their parents are working, and they can't get to sleep because it's taking them a long time to get their younger sibling to sleep"; "they don't have the kind of care that most students have"; and "they are not supported as well emotionally as they ought to be." He believed that part of the problem becomes talking with these students, since they are "very proud: they wouldn't want to ever acknowledge the fact that there is a problem within their own home, and yet you know that they are suffering." Another facet of the problem was to determine the method of discussing with the parents "how we can help the child."

Although there was discussion at great length regarding the processes which the respondent used in decision making, the respondent provided only this singular example of a decision situation which was ill-structured throughout the interview. The reason for the limited number of examples may have been a semantic difficulty with the term "ill-structured." Using the term ill-structured may have implied a meaning which questioned the quality of the principal's decision and, possibly, the ability of the principal himself. If the principal assumed the position that good principals act on foreseen situations and do not allow ill-structured situations to develop, the latter interpretation may have been possible.

The respondent's military background may be inferred from his responses. The idea of a Student Handbook as the means to solve problems by providing a code of conduct and expectation of behavior is consistent with a highly-regulated military code of procedures. The respondent provided other examples of ill-structured decision situations when he discussed the processes he used when making a decision.

The Process of Making a Decision

In discussing, at length, the various processes which he used in making decisions, the respondent referred to issues involving students, staff members, and parents. He included extensive examples.

Decision situations involving student concerns and discipline were addressed quickly by the respondent. He emphasized that "students feel that they are treated fairly here, that their concerns are listened to, and that, in fact, if they have a legitimate concern, that it is immediately looked into." Regarding student behavior, a discipline plan has been developed in the school "so that the youngsters at every step realize that they are responsible for their actions" and that "the child knows that whatever has happened, that it has been discussed and that forgiveness has taken

place." To confirm that the situation has been handled in a fair manner, "when each student leaves the office—my office or my assistant's office—tha child is asked, 'Have you been treated fairly?'" According to the respondent, the difficult situations which arise were easily diffused without confrontation and with "never any put-down to the student." The students experiencing disciplinary difficulty were treated with respect and dignity.

Teachers, who are to bring discipline problems to the office, were to write down, during their break, the particulars of the situation in a book which was in the staff room. The respondent indicated that he told the staff that "I don't want to hear about Joey in my office unless you're prepared to write the thing down for me." The staff were to "write down what happened," what the teacher did about it, and if the parents were called. The book was called "Save Your Bacon." The respondent indicated that "of course, it's funny, but the teachers saw slowly but surely that they had to do something about keeping something in place as to what happened to the student, because somewhere it was going to catch up to them." The process was not merely a form of record-keeping but was designed to minimize the exposure of teachers to possible eventual difficulty. The respondent was aware of potential risk and attempted to reduce the risk for his staff and himself.

The respondent also revealed that, when a teacher comes to him or his assistant principal indicating that "there's a real problem here," he immediately thinks about diffusion—defusing any situation—that may mean that I will immediately ask the assistant principal to talk to the teacher while I go upstairs and see what's happening." The child who was involved in the problem situation and a couple of other students were asked to leave the room on the pretext that the principal needed some help, such as moving "the piano from one room to another." The respondent described the scenario as

> I may ask for help of Joey, and Jim and you, John, "I need somebody to help me move the piano from one room to another." And while we do that single thing, nobody in the class realizes that I've brought these three boys out of the classroom—never the one boy—to deal with a problem. They see it as helping me do something. And then I may say to the boys, "I'd like two of you fellows to please do something else for me," while I have a second to say to Joey, "Joey, is there a problem?" "Yes, Mr. A." "All right. Can we discuss it quietly at 11:30?" "Yes, Mr. A." "Can you handle it now in the classroom?" "Yes, Mr. A." Great! I'm gone, he's joined his friends, no great amount of time has been taken, and eventually we get together, Joey and I, to find out what the problem has been.

The respondent, with the aid of his assistant principal, was able to obtain the pertinent information from the teacher, talk to the student to obtain a brief review of the student's perspective of the situation and gain an assurance that the student would behave properly in class, and agree on a meeting time with the student to discuss the situation. The teacher had an immediate opportunity to relate his or her perspective of the situation. The student was treated in a calm and professional manner without embarrassment and "loss of face." The student and teacher were given time to calm themselves prior to being in class together. The escalation of the problem situation was reduced, and the situation was diffused. The principal and the assistant principal, working as a team, had time to confer prior to the 11:30 A.M. meeting with the student to determine what happened. Besides difficult situations between students and teachers, Principal A also described situations which involved parents.

The respondent confirmed that parents may call and "get angry, they may blow their horn, as you say. I've got to keep the receiver off to the side." Here, the decision situation was one of conflict. In dealing with the situation, the respondent stated that "I let them blow it, and then I say, 'You know, John, I know exactly how you feel, and I can't blame you for feeling that way, but would you let me check into it?' and the parent then recognizes that I'm prepared to negotiate this thing." The principal used his interpersonal skills to diffuse the situation and prevent it from escalating. "I don't

inflame the situation," the respondent disclosed. The respondent indicated that he would thank the parent for telling him of the situation, and tell the parent, "I need to talk to your son as well as to the teacher who's involved here." An appointment was subsequently arranged with the parent for that evening, after school, or the next day. Time was gained to investigate the situation and to give the complainant an opportunity to cool down and become less emotional. He was also aware that, in raising children, "the parent doesn't know which way to turn" at times. The respondent believed that his calm and professional approach was the result of his experiential background and interpersonal skills. His strategy to first diffuse the situation and then be willing to negotiate was an effective strategy in resolving conflict decision situations. He further indicated that a number of his peers took a more confrontational approach.

On two occasions during the interview, the respondent gave examples of the confrontational approaches used by some of his peers with difficult or angry parents. He stated that "I know a lot of my peers will, in fact, come back to that parent and say, 'Now, who the hell do you think you are?' in so many words. Who do you think you are talking to me that way? Who the hell do you think you are talking about my teacher that way? Do you think that maybe your son hasn't got any involvement in all this? Do you think maybe he's not the one to be blamed first?" In the second instance, the respondent stated that "some of my peers seem to think that because they've reached the honorable stage of being called a principal, that makes them invincible." According to the respondent, the belligerent behavior was "not going to help anybody," and the attitude of invincibility was "the furthest thing from the truth."

Instead, the respondent viewed his role as a facilitator; a "facilitator in terms of the children, let alone their parents; let alone the other people that I must deal with; the members of the clergy; my own colleagues downtown; my bosses; people who have a

great deal of interest in this school and this program." He felt successful and effective in the role of principal. He found that "our success stems from our ability to recruit the right person; we don't simply take people that we're asked to take. It's very obvious that, in order to run an effective school, the right staff have to be brought together, and that goes from the custodians up" On account of these factors, his background, and his proactive methods, he felt that he had very few ill-structured decision situations.

When the researcher asked, "When you're presented with a situation, a decision situation, what are your thoughts, your initial thoughts?" the respondent stated that he would "quickly assess whether, in fact, the teacher has been having some problems himself or herself, because I recognize—so do you—that we all go to work and you never know which member of your staff might have had a tough morning or a tough night. Is there something in fact brewing in their personal life that's really been impacting on their relationship with others on the staff . . . along with youngsters?" His assessment included reflection on the staff member's interactions with others, especially if the interactions were different than expected. The respondent indicated that he would think of such questions as: "Are they sitting with the staff at lunch time? Are they, in fact, talking to staff members?" The answers to these questions may alert an observer to the possibility that the staff member may be experiencing a personal difficulty. The respondent appeared to indicate that he had the ability to observe and find indications of possible underlying reasons for the situation rather than accepting the overt representation of the situation. Implicit within his response was the view that the staff member had contributed to the situation through inappropriate action which may be caused by extraneous factors, such as personal problems. These factors may have negatively affected the staff member's perception of the situation, or reaction to the situation.

The researcher attempted to determine the process that the respondent would follow in the most difficult decision-making situations. The respondent replied that, if he ever got to the point where he had a major problem, he would like to sit down, think about it, and not rush into the decision. He would call in his assistant and they would "take all the time we think we need to get this thing straightened out." One aspect of review would probably include careful problem identification.

On a number of occasions during the course of the interview, the respondent made particular reference to the determination of the real problem, assuming that it was different than the presented problem. Referring to a situation with a concerned parent, the respondent believed it was important "not only being able to perceive where people are coming from, but to be able to break down what appears to be the problem to really find out what is the problem." When the teacher brought forward a problem with a student, as discussed above, the respondent did not immediately accept the problem as represented but mentally reviewed the possibility that the teacher may be experiencing personal problems which may have contributed to, if not originated, the problem. In another example of problem identification, this time involving a student, the respondent stated that "we can see that Joe over there is complaining about something. We recognize through experience, through personality, through the fact that we have a trust relationship with that youngster, that, in fact, that is really not the problem. When we shake the whole thing down just by my talking to Joey or the assistant, Joey comes out with what the problem really is." In an example involving a student brought to the office on a number of occasions for improper behavior, the respondent had asked the student, "Now, what really is the problem?" The respondent was very aware that on occasion the presented problem may not be the actual problem. The process of problem clarification in a decision situation may be as important, if not more important, that selecting a solution or making a decision which will resolve the situation.

In summary, the respondent identified various processes which he used in decision situations. He developed procedures to address anticipated situations with student discipline which included rules of conduct within the Student Handbook, a Discipline Plan, and a discipline book for teachers to record difficulties with students. He used a team approach with his assistant principal in difficult situations. He treated individuals with respect and dignity so that they would not "lose face." In conflict situations with parents, his primary concern was to diffuse the situation and then negotiate. He was willing to accommodate parents' needs by setting meetings with parents in the evening. He remained calm, and treated even the most belligerent parents with respect. He focused on resolving difficult situations rather than becoming emotional, angry, or feeling threatened. He used clues and interview techniques to determine the real problem rather than accepting the presented problem. He viewed himself as a facilitator. He stated that the processes that he used were the result of his experiences prior to entering teaching and as administrator. He further believed that the processes which he employed were superior to those used by some of his peers. His well-developed interpersonal skills contributed to the success of his decision-making processes. He was confident that he was an effective principal and decision maker. He did, however, indicate a concern about his relationship with his superiors at central office.

Relationship With Area Superintendent

Since at the time of the interview there was rumour that the school might be reduced in size or even closed, the respondent voiced a number of concerns about his relationship with his superiors at central office. He was particularly concerned about the relationship with his area superintendent, who had only held the position for two years. The respondent sensed that a problem may exist with his central office superiors

due to their "unwillingness to negotiate, the unwillingness to discuss, the unwillingness to really shake the thing to find out what really is the problem." He believed that the relationship with central office was shaky due to a lack of trust. Consequently, he wondered if there was something "that my bosses see in my partner, or is it something that they see in me that keeps them from wanting to come here and say, 'We need to discuss this with you.'" He attempted to understand the reasons for the lack of communication. From the respondent's comments, one would assume that he was experiencing a feeling of isolation. He was concerned that decisions may be made by central office personnel which would affect the continuance of the bilingual program and possibly the school itself.

The respondent described a proposed meeting with the area superintendent regarding school closure or consolidation. The respondent was to be the chairman of the meeting. He was then informed that another individual was to chair the meeting. Subsequently, another change occurred in favor of the respondent chairing the meeting. The respondent accepted the changes with "no question, no problem." Although he appeared frustrated with the events, he believed that, "in all of this, he's [the area superintendent] learning a little bit about me, and I'm certainly learning something about him: that he's recognizing that I'm not running to him saying, 'The thing is out of control,' or 'Throw another phone at those people and keep them off your back for another while.'" Although disappointed in the lack of communication, the respondent continued to be confident in himself and the manner in which he operated the school. He stated that "it's got to the point where you believe in yourself, and you believe that he's going to find out about the way you operate this school in his own way. You're not going to push it on him; he's got to find out for himself." His patience may have been rewarded since the area superintendent had invited the respondent to lunch and said, "I hope we can be friends." The respondent reasoned that the area

superintendent had determined that his performance was superior to that of many of his peers. The area superintendent had seen "the different ways in which administrators talk to him or the questions that they're bringing to his peers, the other area superintendents, to the extent that perhaps now he's saying, 'There are problems. The kinds of problems that some of these guys are bringing forth makes me wonder whether they can operate their schools or not?" The respondent believed that he did not have such a problem, or at least did not bring such problems to the attention of the area superintendent.

When the researcher inquired if the respondent consulted the area superintendents regarding decision situations, he replied that "the area superintendents are in the picture as much as I feel they need to be." Upon elaboration, the respondent was primarily concerned with the reactions and perceptions of the area superintendent rather than using him as a source of assistance. The respondent described his awareness of "the perception that if I, in fact, were to call them all the time, that perhaps they would say, 'Well, he's having difficulty running the school.'" He further believed that "there is a perception also that if I don't call him enough, he may feel that I'm ignoring him" or that "because I'm a quiet type of fellow, perhaps I'm shy of meeting him at any level, and that is, of course, far from the truth." The respondent's confidence in his ability and manner of directing his school did not prevent him from thinking about the area superintendent's perceptions of the frequency as well as the themes of their communications. It was apparent that communication with the area superintendent was modified to minimize perceptions which would undermine the school program and the principal's position. It was important for the respondent to be perceived by his area superintendent as a competent if not an excellent principal.

The respondent enumerated some concerns about his relationship with central office personnel, especially the area superintendent. There was a lack of

communication and possibly a lack of trust between himself and the area superintendent. Although he wondered if their perceptions of himself or his assistant had led to the lack of communication, he remained confident of his ability. He believed that the area superintendent was starting to realize that he was an excellent principal. The respondent took care in originating communication with the area superintendent since he believed that the frequency and content of communication affected the area superintendent's perception of the respondent's ability and competence.

Summary

Throughout the interview, Principal A's candid communication revealed his personal characteristics, described potential ill-structured decision situations, explained the processes which he used in making a decision, and commented on his relationship with central office officials, especially the area superintendent. The respondent characterized himself as flexible, nurturing, fair, a risk taker, and a good negotiator, possessing good interpersonal skills and the ability to understand human behavior. He was confident in himself and believed that he was a competent and good administrator.

Besides revealing these personal characteristics, the respondent discussed decision situations which involved students, staff, and parents. He did not believe that any of these situations were exceptionally difficult or ill-structured. The respondent was confident that he was able to identify potentially difficult situations and take steps which prevented them from becoming ill-structured. The respondent's reluctance to acknowledge the prevalence of ill-structured decision situations may have come from a belief that competent administrators did not have ill-structured decision situations.

Along with describing various decision situations, the respondent outlined the processes which he used in these situations. A number of procedures were developed to

deal with situations before they became major problems. He indicated that, with his assistant principal, a team approach was used in dealing with situations involving students. With a conflict situation, the respondent attempted to diffuse the situation to prevent it from escalating. He treated those involved with respect so that they would not lose face as he endeavored to reach a negotiated solution. Using observations and various clues, the respondent tried to determine the underlying or real problem rather than immediately accepting the presented problem. The respondent approached decision situations in a professional, calm, and unemotional manner.

The respondent seemed perplexed, however, about his relationship with the central office personnel, especially his area superintendent. He speculated that the newness of the area superintendent to the position, two years, and the number of difficult situations which the area superintendent had to resolve throughout the district may have prevented a close relationship from developing. The respondent remained confident in his abilities and his manner of administrating the school. He expected that, in time, the area superintendent would also recognize his capabilities. The respondent was particularly aware of the importance of being careful about the manner and frequency of his communications with the area superintendent so that he would not get the wrong perception about the respondent's competence or desire for communication.

The respondent answered the researcher's questions in a thorough and straightforward manner. Principal A's responses provided insight into the manner in which he approached decision situations.

Case Study — Principal B

Principal B was the second principal interviewed. The interview took place in the principal's office at the end of the school day and lasted approximately one-and-a-

quarter hours. The principal sat behind his desk during the interview. The respondent appeared to have some difficulty understanding either the questions he was being asked or possibly the type of answer that the researcher was looking for. In the interview he asked a number of questions to clarify the researcher's requests. It seemed that the respondent sought questions to which he could provide precise and brief answers. His cautious approach to answering the questions may have been the result of extensive administrative experience.

Principal B's administrative experience included being principal of seven or eight schools in a twenty-two-to twenty-three-year time period. At the time of the interview, the respondent had been principal of this particular school since it had opened seven years earlier.

The school was dedicated to the French Immersion program. School enrollment had grown from one hundred and eighty students at its opening to the then present enrollment of five hundred students. The respondent indicated that they "absorbed junior high for three years, then went back to all elementary" due to increasing enrollments. The administrative team consisted of the principal, an assistant principal, and a half-time counsellor. The counsellor attended the school in the morning for one month and the afternoon the next month.

The school was situated in a developing subdivision within the city limits. The subdivision, characterized by a significant number of modest homes and condominiums, had experienced rapid growth. The subdivision had a large number of residents who were new to Canada.

Personal Characteristics

During the first half of the interview, the respondent was reluctant to elaborate on his responses, limiting information to specifically answering the questions. Toward the end of the interview, however, the responses were lengthy and comprehensive. Although in the latter part of the interview more information was provided, few personal characteristics were divulged at any time during the interaction.

On two occasions toward the end of the interview, the respondent stated that he talked a lot. When asked if there were any other questions which the researcher could have asked, the respondent replied, " I think you've asked quite a few questions, and I talk a lot, so I know you'll have a hard time going through all the material already." The second statement, after the researcher thanked the respondent for the wealth of information which he had provided, was: "I don't know if it's such a wealth, but I know I talk a lot." His responses depicted a self-effacing and apologetic nature as well as a concern for the researcher. This observation was confirmed when the respondent was asked if he was a good decision maker, and he said, "I don't know if I'm that good a decision maker. I know I have to make decisions, but how good I am I don't know." When asked if the decisions were good, he replied, "Well, I try. I do the best that I can."

The respondent was calm and thoughtful. He revealed that he "didn't like to overreact in certain situations." He was reflective in his approach to administration by applying the effective teaching guidelines of "monitoring and adjusting" advocated by "Marilyn Hunter [he probably meant Madeline Hunter]." He was willing to ponder and "read up on different types of situations."

The respondent's hesitancy to provide insights regarding his personal characteristics may have been because of his own level of trust. He may have needed

more time to develop a relationship with the researcher in order to feel comfortable in sharing his personal ideas and characteristics.

Ill-Structured Decision Situations

The respondent was asked to give examples of ill-structured decision situations which the researcher described as "ones that are novel, new; where some creativity or conflict might be involved; you need to have creative solutions and judgements; innovative solutions." His first example referred to staff placement "where someone has been placed in a school, and it just didn't work out." Persons placed within the school may not fit the climate of the school or grade level, and the decision has to be made to transfer, release, or work with them to modify the difficulty. He stated that "if I approach the boards or whatever--administration, and ask for a replacement for this particular person and there isn't anyone, what happens then? These are the type of things which I feel are really, really difficult." The respondent described such a placement as "not well-structured" and subsequently stated that "the placement had been ill-structured."

Since the respondent mentioned parents in conjunction with this example, to stimulate discussion the researcher assumed the role of an irate parent calling the principal to vigorously complain about the child's teacher and program. The respondent confirmed that similar statements were made to him by parents over the phone or in person.

Parents were also involved in a difficult situation, which the respondent described as "very weighty, like, 'Do you recommend the child for special placement?' And you know that the parents don't want to go for the special placement at all." The respondent wondered "How much do you pursue this? How much can you coax them into it, and that type of thing?" The difficult situation was created by the difference

between the school's professional judgement of what is best for the child and the particular wishes of the parents of that child.

Another situation which was described as difficult, if not ill-structured, was one in which the problems or hardships were caused for the school staff by being "assigned a person [student] that comes from another school who is a real troublemaker, and the school board says, 'You have to take them.' Now, that's a type of situation which is very difficult. You've got to explain it to the group, and you know that'll be uncomfortable." This ill-structured situation may be either described as the implementation of an unfavorable school board decision or as a staff/student conflict.

The respondent suggested that child neglect or abuse was another ill-structured decision situation. He stated that "there are situations where you see that for the good of the child you have to make a very difficult decision. To call Social Services, for example, when a child is really being neglected or that type of situation." The positive and negative consequences over the short and long term needed to be identified. An incorrect decision may have disastrous consequences for all parties involved.

When the respondent referred to "cases where we're charting uncharted waters," he provided the example, from many years ago and at another school, of elementary students being offered drugs by older students on a school bus. The substance was later smoked by the students on the school ground. At the time there was no school district policy to deal with the situation.

The respondent advised that there were a number of decision situations which were ill-structured. They involved inappropriate staff placement, irate parents, the special placement of students, being assigned an exceptionally difficult student, child neglect and abuse, and unusual situations which occasionally arise. The examples provided were consistent with the brief definition of ill-structured decision situations given by the researcher. However, it seemed inappropriate for the respondent to use "not

well-structured" and "ill-structured" to specifically describe an unsuitable staff assignment. The use of terminology like ill-structured may have created some confusion for the respondent.

The Process of Making A Decision

The respondent provided insight into the processes which he used to address and resolve decision situations. He discussed the situation of a staff member who did not fit the climate of the school, grade level, or school situation. The respondent had to decide to either replace the teacher or "take quite a bit of time . . . and assess that person and work through the situation." The respondent hinted at his reluctance to initiate the process to replace the staff member since it is "really, really difficult" if a replacement is requested and one is not available. Keeping the teacher necessitated working with the teacher, tailoring a program for that individual, and obtaining parental assistance. The respondent revealed that he would explain to the parents that "this is a situation where we're going to need your help. You've got to bear with us because we don't have anyone else available. You just won't have a teacher if you don't have someone that you can work with in there." The parents were required to choose between two unfavorable alternatives: accepting the unsuitable teacher or being without a teacher. Not only was their support requested by the respondent but they seemed to be pressured to accept the unsuitable teacher. The teacher seemed to receive very little support from the respondent.

The respondent discussed situations which involved complaints from parents about teachers. He disclosed that he would advise the parents of the sequence of actions available to them. The respondent was insistent that the parents first talk to the teacher, even when they were afraid of repercussions for their children. The respondent indicated that he would say to the parents that "if you want anything positive to happen

and so on, talk to the teacher, and sometimes it will resolve itself." The parents were also told that if matters did not work out with the teacher then the principal would become involved, and if they felt that the issue was still not resolved they could go to the area superintendent. The respondent revealed that, after advocating that the parent speak to the teacher, he did not "appreciate them just going from a situation, informing a school board member right away."

If matters did not work out between the parent and the teacher, the respondent stated that he would work with both of them to "see if we can come to a type of situation which does work out." In describing his discussions with the teacher, the respondent stated that he would determine if the teacher had "another modus operandi" and "see if we can't come to something that will be workable in trying to find a solution at that stage." The respondent revealed that he tried to "help them in different ways, to propose solutions, different alternatives, and courses of action." With a relatively minor situation, the respondent disclosed that he would tell the parents to give the teacher "a chance and let's hope things will work out." The respondent assumed the role of mediator to reach a negotiated settlement. The respondent attempted to influence the teacher to modify behavior and methods while the parents were influenced to be more tolerant and allow changes to take place and develop.

The respondent reported that he attempted to resolve these situations at the school level. However, if an arrangement were not negotiated between the parent and the teacher, especially if the teacher refused to accept any of the proposed solution alternatives, then the area superintendent or someone from central office would be called in to "work out a course of action."

In this context of parent/teacher conflict, the respondent believed that the "the parents' perception is something that has to be looked at and examined" and possibly

modified. If complaints are coming from individual parents, then the respondent would meet with the parents individually "because I don't want to have a group of persons--that's one against five or eight." The respondent believed that on occasion parents may discuss an issue together and then phone the school individually. "If I perceive that they all got together, I might as well meet them all together as to meet them individually," the respondent disclosed. The respondent stated that he would "face them as a group" if they were together on an issue and "there is one leader in the group." He would be prepared to deal with their unified concern and he would not have to repeat himself with a number of interviews. The respondent divulged that he would "call the group in and say exactly:"

> Okay, here are the objectives that we have in this school. Here's the way we proceed, our routines and that, and already in seven years we've got a certain type of a way of working, and we can see if there is success in this way and so on. Now, if we've had success for six years and if we keep on working in the same way, it's unlikely that you're going to get some difficulties unless there's a pretty big change. If we make an about change completely, well, then, that's uncharted waters, but otherwise, there's a certain type of procedure. So if someone comes with another approach and so on, but if we see that it's very educational, that it's viable and that, maybe they have to give a person a chance.

The respondent also indicated that he may tell the parents that "here is the strength that I see in this particular situation" and "here's the outcome of this particular approach." He stated that he would say to the parents, "Give us two months, and you're going to be seeing a few different things."

Referring specifically to a parent's concern with the Alberta Education mandated whole language approach, the respondent recounted what he had said to the parent that very day. He told the parent:

> Okay, I've been watching this approach a bit, too. There are certain types of things that I want to be aware of. I want certain kinds of things to be in place so that this approach will be successful. I know that it's geared for a certain number of students. It might not take care of all of the students, so one of the things that I want to do is have a little bit of time to look at

> it, for maybe a year down the road and so on, so I can't pronounce a judgement exactly on that. . . . We have to give it a chance for two or three years and look at it and be maybe that much more critical if it doesn't work out after two or three years. But if we just condemn it right now, we'll be right back to where we were before. Maybe we're not giving it a chance, and maybe in a few years we'll find out that we made a mistake.

In this example, the respondent assured the parent that he was critically observing the program to determine that the aspects of the program were in place that would lead to success. He also indicated that he was aware that the program was evolving and that each student may not receive benefit at the same level. After assuring the parent that he was on top of the situation, the respondent developed the position to put off any decisions to give the program "a chance" to evolve. In deciding not to make a decision regarding the parent's concerns, the respondent may have expected that as time progressed the students and parents would become more comfortable with the program, thereby eliminating the demand for a decision. The respondent further indicated that difficulties may have been encountered when students who were used to a more structured setting were placed with a teacher who had a less structured teaching style. He conceded that certain students would "be benefitting more one year than the next. But eventually, over the long run, they'll be able to be very adaptable."

The researcher then assumed the role of a belligerent parent continually demanding that his child not be used like a guinea pig with the new program. After each demand, the respondent provided "Yes, but" responses where possible benefits were explored within the general theme that the program needed to be given a chance. One response was that, "there's always a chance that your child may benefit from something that's even better, and if we don't try anything, they might not have a chance to go into that situation where they might profit from certain experiences." The respondent also stated, "Yes, but then there's always remedial situations that come into place in the future. We've got some learning centres, and we've got different types of situations to help

different children, and next year your child will be in another classroom also, where the approach might be slightly modified." The researcher finally said, "I hear what you say, and it all sounds good. I don't buy it. Do something for my child. Get him out of there." The respondent then stated that "the whole language approach, the Department of Education has mandated it for all the schools. The only alternative would be a private school where they'd have the traditional approach, and that would be the only type of situation." With this statement, the respondent presented the finality of the situation and drastic steps that the parents would have to take in order for their child not to be involved with the whole language approach. Up to this point the respondent attempted to be positive with the parents while providing reasons to get their support. The respondent also confirmed that he had received complaints from parents "at different times" which were similar to those presented by the researcher.

After discussing the results and effects of the researcher's role playing, the respondent reflected upon his decision-making strategies. He believed that in many situations

> it's good to wait just a little while, and things might get a little bit up in the air for a little while, but rather than make a hasty decision, it's better to think about it and see what are all the options and sort out some of these things.

He believed that "in the heat of the moment, you might not have made the best decision." Based on his experience, the respondent presumed that

> in some cases things won't change very much in a day or two . . . so calm down, find out what happened, and try to think of all the possible ways to do this, and try to think not only for your particular situation; put yourself in the other person's shoes, see how they feel, how they would react if you said this particular thing.

The respondent advanced the strategy of taking the time to make a decision in order to understand the situation, identify and develop alternative courses of action, and speculate about the possible reactions of the people involved in the situation.

The respondent also disclosed that there were occasions where he had received pressure from parents, teachers, and peers to make a decision. The respondent either used the strategy of putting off or avoiding a decision in the hope that the situation would resolve itself, or he may have taken the time to think about the situation in preparation for making a decision. He believed that, "sometimes it is good to wait and just find out. Some other time it's not good to wait, because the longer you wait, the worse it is."

The respondent emphasized that "preliminary planning is very, very important" in many situations. It minimizes the need for "fire-fighting" and serves to "prevent a lot of things that might happen." The respondent exemplified his preliminary planning in interviewing prospective staff members when he said, "I really structure my interviews and do a lot of work on the questions, and I ask the same questions to every person. So then when you're ready to make a decision, it's a lot easier type of thing, because you've done all of this preliminary type of thing." The respondent was of the belief that the preliminary planning not only made his decision-making process easier, but also prevented many situations from developing into large problems.

Part of the respondent's preliminary planning included a meeting every Friday, from recess to noon, with the assistant principal. The meetings had two purposes. The first purpose was to review the daily calendar of events for the school so that they were aware of what would "be happening for at least two or three weeks." The second purpose was to determine "if anything needed to be looked at before the next week" and to complete those tasks. These meetings enhanced communication as well as planning and preparation for coming events.

Besides these meetings, the principal, the assistant principal, and the counsellor met to receive presentations from teachers describing the particular difficulty that they were experiencing. These meetings excluded discipline cases.

The respondent stated that "the teacher simply makes the presentation, we ask questions and so on, but no decision is made right there." After the presentation, "then we get the three together, and one person of the three takes it on, and we determine exactly how it's going to be approached and then one person takes it on and follows it to its logical conclusion," the respondent recounted. The principal used the group approach for two main reasons. First, allocation of problem situations to one of the administrative team freed other members to attend to other issues while keeping each member of the team aware of the concerns of the teachers. Second, provision of a unified front to the teachers since in the past teachers would select the member of the administrative team to whom they were bring a difficult situation based on a particular expectation of a particular result.

Discipline situations were dealt with by the principal or the assistant principal. If the child's behavior persisted for a third time, the counsellor would become involved with the situation, and the parents may also be called.

When asked if he had thought about decisions he had made and felt that they were the wrong decision, the respondent stated that "I'm sure there must be hundreds of them, because at different times I'm sure you do something and you find out it just didn't work out, so you go back and see if you can work it out better next time." Besides reviewing and evaluating past decisions to prevent or minimize poor decisions, the respondent believed that it was important not to be forced into an immediate decision but to take time to think and reflect on the situation and past experience before making a decision.

The respondent applied the effective teaching strategies of "monitoring and adjusting" to administration by asking such questions as "Did we do it properly? How can we best do it for the next year, for the next day, the next course?" His monitoring

commenced during his thirty-minute drive home, and at times continued far beyond that time. "Certain situations might take two days before you might debrief yourself more or less." He described his monitoring process, using the metaphor of a videotape: "You run the action through and just stop it at different places to just examine that and say, 'Are there other alternatives that could happen?'" Alternative courses of action, with the possible consequences, were subsequently identified for future reference. The respondent also revealed that monitoring events diagnosed possible negative repercussions which needed to be resolved. Monitoring and adjusting decisions enabled a principal to grow. The respondent believed that "if you don't look at what is happening and go over types of things, you are going to do the same thing exactly year after year." Through thought and planning, adjustments are realized the following year.

The respondent was asked to identify the qualities which principals should possess if they were to be good decision makers. He stated that they should be "willing to look and try to explore . . . to ponder; if necessary to read up on different types of situations." Acquiring information and data were prerequisites to decision making. Consultation was a source of information. The respondent suggested to "try to give some of the decisions that you're about to make to someone else and see how they react to it." Also opinions could be obtained from "people who are affected by the decision and others who might be some of your line officers," the respondent stated. Specialists within the district were occasionally asked, "How do you work this out?" Other principals were called, since the respondent thought that "at certain times it's good to find out some of the procedures that others have, and it wasn't written in these policies." Deciding to wait to make a decision was again emphasized by the respondent. More information could therefore be obtained. The respondent disclosed that waiting to make a decision occasionally eliminated the need to make a decision when he said, "Some decisions just wear themselves out by the fact that it [the decision] doesn't have to be made." Finally the respondent maintained that the principal should try to be

proactive. "In the long run, it'll be a lot easier on everyone, because it's never a good feeling to be fire-fighting, and the more planning you can do beforehand, the more things you can put in place beforehand, the more work you'll do beforehand, but a lot less you'll do afterwards, and it'll be a positive type of work that you do." In summary, to be a good decision maker, a principal should explore, research the theory and practise pertaining to an issue, ponder, consult with a variety of interested people and others, plan and prepare for the anticipated situation, and finally wait to make a decision where possible.

Relationship With Area Superintendent

The respondent disclosed that he would consult with the area superintendent on two occasions. The first would be to determine future plans of the district. The second would be relating to a staff assignment which didn't "seem to work out." With the aid of the area superintendent, the situation would be resolved in a group setting. Other than on these occasions, the respondent appeared to have little interaction with the area superintendent's office.

Summary

During the interview Principal B gave the impression that he was rather reluctant to provide in-depth answers to the researcher's questions. A reason for this behavior may have been a semantic difficulty which arose through the use of term "ill-structured" to describe decision situations, since the respondent seemed unacquainted with this use of the terminology. As the interview progressed and greater prompting was given by the researcher more information was forthcoming.

Data regarding the respondent's personal characteristics were rather limited. When asked to identify examples of decision situations which were ill-structured, the

respondent described situations which involved inappropriate staff placement, irate parents, the special placement of students, and being assigned an exceptionally difficult student. The greatest information was obtained about the decision-making processes used by the respondent, especially as they related to specific incidents.

In making decisions under ill-structured situations, the respondent reflected upon past experiences to determine if similar decision situations had occurred, as well as to recall the actions that he had taken on those occasions. Reflection also enabled him to monitor and adjust the decisions which he had made. He believed that it was important to consult with other individuals, such as staff members, his assistant principal, central office personnel, the area superintendent, and other principals, especially if the situation had not previously arisen. The respondent attempted to minimize the number of difficult decision situations which may develop by being proactive, developing procedures to identify emerging potentially difficult situations, and through preliminary planning. He functioned as a mediator to negotiate solutions, particularly under conditions of conflict. He endeavored to convince parents to support or accept a state of affairs, to which they were opposed, by presenting alternative options which were less acceptable than the status quo. One strategy which he frequently used was to delay a decision in order to obtain more information, to understand the case, and to think and reflect on past experience. The delaying strategy may have also been used with the hope that the situation would resolve itself and no decision would be required.

Occasionally the area superintendent was included in the respondent's decision-making process. The relationship which the respondent had with the area superintendent seemed positive but somewhat distant.

Case Study: Principal C

The one-hour interview with the third principal, Principal C, took place in his office during the last period of the day. It was a small office with books and educational materials distributed relatively haphazardly on book shelves and filing cabinets. A large fan was in operation in the office throughout the interview to mediate the effects of a very hot day.

This ten-year-old elementary school was built when the subdivision was first being developed. At the time of the interview, it was one of five elementary schools which the school district built within the subdivision. When it opened, the school had an enrollment of forty-two students taught by the present principal and one other teacher. Over the years, the enrollment had increased to three hundred students taught by sixteen teachers. These students lived within the community and walked to school. The respondent described the community by stating that "we have a lot of low-cost housing here, but we also have the quite affluent people, too; we have a good mix." The respondent appeared comfortable with the community and the clients of the school.

During his twenty years of experience as a teacher, the respondent was an assistant principal for three years and principal for ten years. His entire principalship was at the present school. Throughout the interview, the respondent was very open and eagerly discussed his views, experiences, and processes.

Personal Characteristics

Although the interview centered around identifying decision situations which could be classified as ill-structured and the processes used in resolving those situations, the respondent revealed a number of personal characteristics during the interaction. He believed that he was "classed as a workaholic both at home and at school" since his way

of dealing with stress was "to work harder." He also felt that he was learning that this type of behavior "was not always good." Over his principalship, the respondent had developed insights and strategies which enabled him to approach situations with lower levels of stress.

When he first assumed the principalship, the respondent tended to personalize situations and display a condition of insecurity, as exemplified by the statement:

> Ten years ago I might have acted first on a little bit of fear: What did I do wrong at this school so this parent is so upset? I think as educators we often do that. We always think it's our fault and something we'd better fix up, when it isn't always the case.

After ten years as principal, the respondent described an approach which was more rational and less emotional, when he stated: "Today if I got that kind of a call I would thank the parent for calling and bringing the matter to my attention, I would tell them that I would investigate and get back to them." Later in the interview, the respondent provided further insight into his views regarding discussions with an abusive parent when he stated:

> There are things that, if you were a parent, came in now and said to me, I wouldn't tolerate (as I might have even five years ago) because I would have felt, since I am principal, I've got to listen to anything you want to say. And I don't have to. I realize that now, but I think we think that we have to be answerable to everyone, and we don't.

The respondent's security within his position and his self-confidence had increased with his experience in the principalship. "Your experience helps you gain confidence. That's what happened to me especially in the problem, ill-structured situations, because any of us who are confronted with a real serious problem, they're hard to take, especially the first time you're confronted with it," the respondent revealed. His past experiences enabled the respondent to approach evolving ill-structured decision situations with less anxiety and stress. The processes he subsequently used in decision

making were probably less emotional and more cognitive or rational. The respondent presumed that "with all the experience you start to make better decisions."

The respondent thought that greater experience led to increased confidence and greater confidence, led to better decisions. In his belief, then, principals who are more confident may make better decisions, or at least be at greater ease in making the decisions. The advice which the respondent said he would give to other administrators was essentially to be more confident. The advice included: "Have courage to understand your limitations," call for assistance from a superior if you cannot deal any more with a totally unreasonable parent, and "You do the best with what you got." Furthermore, "Don't get panicky just because so-and-so is coming in to see you." The respondent revealed that he had "learned with experience." To new administrators, the respondent had suggested "Don't be afraid to show your vulnerability," which is a plea for administrators to have the self-confidence to show their fallibility and human nature.

The respondent also indicated that he was approachable, flexible, fair to everyone, honest, and could be firm if that was required. He viewed the principalship as analogous to being a captain of a ship. As the captain, he felt he should be able to run the ship. "I like the fact that they give us the confidence to make decisions, and I am prepared to be accountable for them," the respondent explained. He also believed that being accountable for one's decisions helps one make better decisions. When asked if his staff and, then, if his area superintendent felt that he was a good decision maker, the respondent answered "yes" to both questions.

The respondent revealed a number of personal characteristics which he possessed and which were necessary to be a school principal and a good decision maker. Certain characteristics, such as self-confidence, developed and increased with his experience in resolving ill-structured situations. These experiences also enabled the respondent to manage and reduce stress, which was one of his personal responses to the difficult situations. With increased experience and self-confidence, the respondent was

able to accept his own decisions, as exemplified by his statement that "I think I've learned more and more over the years that I can't feel guilty for that kind of a decision [one that could have been better], that I have to understand that my limitations are there, too." The respondent was aware that the results of trying his best were at times less than optimal in making decisions in ill-structured situations.

Ill-Structured Decision Situations

The respondent was asked to give examples of decision situations requiring creative decision judgements which were unique and could be classified as ill-structured. The respondent thought that situations involving "spur-of-the-moment things," such as unexpected phone calls, student behavior, and dealing with parents in relation to their child, were ill-structured decision situations. The respondent discussed, in more detail, four types of decision situations which could be classified as ill-structured.

The first type of decision situation he described involved the retention of students, especially in grades K through two. He saw these "very subjective" decision situations as ill-structured since each case tended to be unique and at times quite protracted. Of such cases, the respondent said, "There's a lot of dialogue that takes place throughout the year with the teacher, the parent, the principal."

The second type of ill-structured decision situation he discussed involved irate parents who were not supportive of the school and frequently caused difficulty. As an example, the respondent referred to a situation with the parents of a student who had been at the school for three-and-a-half years when he said:

> Last year at this time I had to finally suspend the parents and the child from this school. It was a very messy case, probably my most difficult case in twenty years. In fact, if I had another year like last year to live over, I would be in a different profession. That experience over three-and-a-half years taught me more in making decisions, dealing with irate

> parents, than anything. But I guess I had to go through it to really understand what I have to do. I would say with that child we tried more proactive things than with any child in my career. The reason none of them were successful was because of the parent, not because of the child.

The child was the only one who the principal had suspended from school in his career. With a degree of resignation, however, the respondent believed that, "to be proactive, we should have suspended them the first time three-and-a-half years ago." Had he followed this later strategy, it would certainly have made the principal's life easier, but it would only have transferred the problem to another principal without resolving the situation.

In another situation which involved an irate parent, the respondent divulged that he had disallowed the parent from coming to the school. In this decision "all the people downtown" were involved. The respondent "even went to the board." The consequence of the decision was that the parents "withdrew their child from the school."

The third group of ill-structured decision situations, which the respondent identified, related to the abuse of children. The respondent stated that he would report "a child, an incident" if abuse was suspected. However, he had experienced difficulties with two former cases which he had reported. The information he had given the authorities "was all shared with the parent, and it came right back into this room." The respondent felt that such occurrences serve to make one reluctant to report cases in the future. The respondent reflected upon these situations to develop clues for future action when he stated, " But I guess you have to get a thick skin and decide, well, maybe I didn't read the people I was calling well enough, and I told them too much, and again, go back and see what's best for the child."

The fourth and final type of ill-structured decision situations was described by the respondent as being those long-term decisions regarding policy which had "never

been done in our system before, so it's new; we're breaking new ground." The example involved a plan for a new approach to inservice by taking "a two-day inservice away from Edmonton" for staff professional development. "We are prepared to leave on a Wednesday, even to work hard on Saturday. We are prepared financially to pay for our accommodations," the respondent stated. A proposal for this kind of retreat was developed in collaboration with the Parent Advisory Council and other interested parties for presentation to the central office administrators. The respondent looked upon this situation as ill-structured since this arrangement had never been attempted before.

The decision situations which the respondent classified as ill-structured involved the retention of children in grades K through three, irate parents, child abuse, and the inauguration of totally new procedures. The respondent made a brief reference to staffing and programming as having the potential to become ill-structured decision situations. The processes and strategies used to arrive at a decision were generally specific to the situation.

The Process of Making A Decision

The respondent approached the process of decision making under the governing principle of seeking what was best for the child. He reflected upon past experiences for insights into understanding and resolving new situations. "I think one of the best things for making decisions--like that in an ill-structured situation--is experience. The decision I would make today might be quite different from the one I would have made ten years ago," the respondent said. A repertoire of experiences had given the respondent an opportunity for learning and developing insights that produced different, if not better, decisions. Besides reflecting on past decisions, the respondent also reflected on his actions in present situations to monitor and evaluate his emerging

decisions. He stated that the reflection occurred "most often when you have a quiet time . . . on the way home; maybe it's while you're lying in bed, or whatever." Reflection enabled the respondent to prepare for emerging decision situations as well as to evaluate and possibly amend his most recent decisions. Moreover, reflection upon the history of developing situations occasionally revealed to the respondent that if other decisions have been made then the present situation may have been minimized if not eliminated. "I think until we've experienced certain things in our work, we sometimes let them go too long because maybe we're afraid of what happened," explained the respondent.

This insight may have influenced the procedures which the respondent developed regarding the potential retention of children at a grade level. Teachers were requested to obtain information, early in the year, on students who were struggling to complete their homework and acquire the prescribed curricular skills. For the first reporting period in October, they were to "make the parents aware that 'Your child is suffering. They're really struggling.'" At the second reporting period, the beginning of February, the respondent required the teachers to identify the students who "are really going to struggle to get through the year" and provide him with a half-page report giving the "name of the child, areas in which they are having difficulty, and what you told the parents, and what their response was: How they received this kind of information." In June, the teacher and the parent were to discuss the retention of the child. The respondent explained that he would become involved in these discussions if the parents insisted that their child be passed. Two specific situations were related by respondent.

In the first situation the respondent insisted on retaining a student in grade one even though the parents demanded that the child be passed to the next grade. The principal made this decision on the grounds of what he believed to be best for the child. He told the parents, "Ethically, morally, professionally, I would be doing an injustice to

your child to tell you that that child can go on to grade two." The respondent described the parents' position as:

> Their reason, maybe, for passing is more family oriented; they're lovely people to have and to teach their children, but they don't want their child to fail because Grandma will be upset and Auntie will be upset.

Although the respondent was firm in his decision, he gave the parents an explanation of the procedures which they could follow to appeal the decision to the area superintendent.

In the second situation, the respondent believed it would be "advantageous for the child to stay back." However, other factors resulted in a different decision. The respondent outlined the situation in the following way:

> The father is the type of man who, if he's saying that the child has to go on, I'm not going to fight with him because I've worked with that family for five years, and several things will happen: Number one, the child will really suffer physically. Secondly, I could suffer. He's this abusive, this man, I don't think I want him to walk in here with a club; he's about twice the size of me, and so I've got to make decisions there in that kind of case. I guess when you say "not using the textbook," I guess the whole thing of just being honest, trustworthy, and knowing your limitations, and the fact that even people who make decisions don't have all the answers.

Again, the respondent believed that his decision was in the immediate best interests of the child. However, it appeared that the decision was one of default to an alternative which minimized any negative fallout. There was the tone of resignation in the respondent's voice and a grudging acceptance of his own limitations in dealing with this family.

Other examples of interactions with difficult or irate parents were shared by the respondent. When the parent was very angry, the respondent attempted to postpone a decision or even a discussion with the parent to the next day to provide an opportunity for emotions to subside. If the angry parent was in the principal's office and a

postponement was not possible, the respondent said that he would call the assistant principal to join the meeting. The assistant principal was able to provide "moral support" and could share his impressions at the end of the meeting. The relationship between the principal and his assistant was strong enough to allow the assistant principal to be very candid in his review of the meeting. The respondent suggested that "we know each other well enough that he's going to say to me, 'You blew it!' He's not going to say 'You did nice stuff' just because he likes me. So that's needed from time to time." The respondent had sufficient confidence in himself and his assistant principal to expose himself to potential criticism in order to reach a good decision or conclusion to a situation. It also illustrated that collaboration and consultation were part of the respondent's decision-making process.

Throughout the interview, the respondent described occasions where he had consulted with various people prior to making a decision. He worked "very closely" with the assistant principal, especially in matters of student discipline and in difficult situations with parents. He also consulted with the students who were involved in the discipline situations to collaboratively arrive at performance contracts or individual student behavioral objectives. If possible, the staff members were involved in most decisions. "There are decisions that I make unilaterally, but if you allow your staff to at least give you some sort of information, to make them aware of something that's happening and give them at least the opportunity to discuss it with you, they feel much better, and they get ownership much more quickly," the respondent reported.

The respondent also consulted with the school secretaries. "Our secretaries know us like the back of our hands. They're a good sounding board for some things without breaking professionalism and confidentiality, because they're the ones that see all the action; they're the ones who know what's going on in the school," the respondent divulged. Later in the interview, he reaffirmed this position when he stated that,

"In tough things, a good secretary makes time for you. She's an excellent sounding board, because she understands how I tick." Knowing his procedures, agenda, and how he feels that particular day, the secretary could act as a gate-keeper and delay access to the respondent. Such action enabled the respondent to prepare for an interaction with a caller and a potential decision situation. In performing the "sounding board" function, the secretary may well have provided information regarding how the respondent had previously interacted with a particular parent or handled a given situation. The influence of school secretaries in the decision-making process was a very interesting revelation.

Besides consulting with members of the staff, the respondent also consulted with his peers outside the school. The respondent regularly met with the principals of the school district's four other elementary schools in the subdivision. Although these meetings were originally designed to coordinate activities in a very specific area, the meetings continued monthly on an informal basis to explore emerging issues and concerns. The respondent described this meeting as follows:

> . . . it gave us principals an opportunity to talk about a few things that were bothering us. For example, a teacher can talk to another teacher in the school and say, 'I have a little problem,' but I don't have anyone to talk to. I have my assistant, yes, but I've just got me; it's pretty lonely. So the five of us could hash out--like, an example: inclement weather; it can be a real problem. We have a policy at this school, this is what we do if it's inclement weather. This school just down the road has a different policy, and parents phone one another and so on, so the five of us will say, 'What do you do when you have inclement weather? What do you do at your school?' 'Well, I do this, and this.' 'Oh, I never thought of that!' And we talk it over.

Although the principal consulted internally with the assistant principal and secretary, he still felt the isolation of being the one "captain of the ship." He had no one in an equal position within the school. A trust had developed among this group of principals enabling them to work collaboratively and assist one another with difficult decision situations. The meetings rendered opportunities to exchange ideas and brainstorm.

The respondent clarified the relationship among the principals by stating that "because the five of us have been working in this area quite a while, I can have a crisis with a teacher or a family and I may call one of them." The purpose of the call would be to obtain information and think about possible alternatives. An example of the respondent's discussion with the other principal was described as: "Here's what happened today. What do you think I should do? What would you do?" This type of consultation occurred frequently. Not only were other principals consulted, but there appeared to be little hesitation to consult superiors at central office.

Besides obtaining information and ideas through the consultation and collaboration to arrive at insights which would result in good decisions, the respondent indicated that he had made mistakes in some of his decisions. He believed that he was "bold enough and man enough" to admit to his error and take steps to remediate the situation. He mentioned an example with a parent where he said, "I'm sorry, Mrs. Jones, I made a judgement error that time, and I'm glad you brought it to my attention, and we'll see what we can do about it." Besides being informed of a possible error, the respondent related that he may realize an error upon subsequent reflection on his performance and decisions. "You try to make the most rational decisions you can at that time," the respondent said. He again emphasized that one had to be "man enough if you make a mistake to own up to it, but then get on with your life." This statement may show a relatively high degree of self-confidence and moral strength to do what is right within our human limitations.

The respondent discussed situations where he had difficulty arriving at a decision or course of action. He had the courage to admit this condition and to take additional time to ponder the issue, as exemplified by his statement: "I think I've even said to people--teachers, staff, children--'I don't know the answer. Let's talk about it again tomorrow.'" Delaying the decision enabled the respondent to think about

possible alternatives and consequences. This approach was based on the philosophy that a better decision would be certainly preferable to a quick decision.

By describing a number of incidents, the respondent gave clues to the processes he used to make decisions. One of the most important components of his decision-making process was reflection upon what was learned from past experiences. These experiences not only increased the respondent's confidence but also provided a framework used to understand the then present situation and to develop a menu of available and viable alternative actions. The respondent developed procedures to acquire information to support difficult decisions. Delay or postponement of discussion and decisions was a strategy used in highly emotional situations to provide opportunities to return to a more rational condition. Delays enabled further thought and consultation.

Consultation was a very important component of the respondents decision-making process. He consulted internally with his assistant principal, secretary, teachers, and students. He was also part of an informal peer support network which included four other principals of the school district within the city's subdivision boundary. Difficult issues were reviewed and discussed. Despite these procedures, the respondent revealed that he had made a number of errors in decision making over the years. The best procedure was to admit to the error, make adjustments, and go on with your life and work, the respondent concluded. He believed that a good decision was superior to a quick decision. Consequently, he occasionally indicated that he had not reached a decision and would require more time to think about the situation. The respondent had little reluctance to consult with his superiors at central office if the situation was developing to the point where it was beyond his limitations.

Relationship With Area Superintendent

Although the respondent believed that he was responsible and accountable for his decisions, he made numerous references to involving his "superiors" in the decision-making process. For instance, in the case of retaining a child at a grade level when the parents were adamant that the child be passed, the respondent stated: "I sometimes get downtown involved a little bit, and then we go from there." He also advised his superiors, primarily through their secretaries, if the decision situation had long-term implications or may be viewed as a major change in direction. He wanted to keep his superiors informed in case they received phone calls from parents. However, he also consulted his superiors directly with problematic situations. "I want to change the staff or I want to declare someone redundant or I need a new program, then I'll call them, but, no, the ordinary run-of-the-mill things, no," the respondent said. He also revealed that "I've had situations where a parent has been so demanding, so unreasonable, that there's no way we can deal with them any more, and you have to make a decision by calling your superiors that something has to be done." The respondent used the term "superiors" to refer to the area superintendent or possibly the school superintendent.

The respondent seemed very comfortable about consulting with his superiors. He did not view frequent consultation with his superiors as an admission of difficulty in making decisions, but as a procedure which reasonably resolved difficult situations and may have produced better decisions. It appeared as if past experiences had conditioned the respondent to readily consult with his superiors, as exemplified by the statement:

> Maybe I learned by my last experience that I should have consulted someone else, maybe in this building or downtown, before I made the decision because of the implications, because you make decisions and then you find out from your superiors, maybe you should have done this first; it just would have made more sense, so you've learned that.

The area superintendent's desire to be informed or consulted may have motivated the principal's behavior to frequently consult with his superiors.

Summary

Principal C, the third principal to be interviewed, was very candid and sincere in providing lengthy responses to questions and insights into the processes he used in making decisions. His self-confidence had greatly increased over his ten years as principal of the school. When confronted with difficult situations, he was less emotional and stressed than earlier in his career, taking a more rational approach to resolving the situation while acknowledging that he had limitations. He believed that he was approachable, flexible, fair to everyone, honest, and firm if that was required. He functioned within a moral and ethical framework. His principalship was a process of personal growth through continual learning and development. Although he believed that he was a good decision maker, he explained, "I think I am becoming a better decision maker. The respondent had the self-assurance to consult with others to seek their opinions regarding possible courses of action in difficult situations. He had the courage to admit that he had made an error in judgement and to remedy that error.

The respondent identified a number of types of situations which he saw as unique, difficult, or ill-structured. These included the retention of students in grade K through three, dealing with irate parents, suspected cases of child abuse, and situations which were a major departure from the established or traditional practices. He only briefly alluded to circumstances involving program changes, conflicts with staff, and of declaring a staff member as redundant as potential ill-structured decision situations.

In making a decision in ill-structured situations, the respondent used his past experience as a guide to future action. He believed that experience was the most important factor in arriving at a decision. Reflection was not restricted to past

experience. The respondent also reflected upon emergent situations to enhance his understanding. He monitored his behaviors by reflecting upon his actions and decisions. If necessary, he selected alternate actions to replace those originally selected. Consultation was another very important part of his decision-making process. Internally, he consulted with the teachers, assistant principal, and school secretary. Externally, besides consulting with personnel at central office, he had very close communication with four other elementary principals of the district located within the city subdivision. The objective was to arrive at the best decision rather than his own decision. With this objective, he also delayed decisions to think about the situation before making a decision. The respondent also attempted to delay a discussion or a decision with a very angry parent to gain time to diffuse the emotional intensity of the situation.

The respondent's inclusion of central office personnel in decision making appeared to have developed as a result of his past experiences. His may be fulfilling the objectives of his area superintendent, since the respondent did not associate any negative reaction to this consultation.

Case Study: Principal D

Principal D was the fourth principal to be interviewed. This soft-spoken, tall and slim individual, dressed in slacks and a sweater, exhibited a relaxed manner even though he was involved in a continuing student discipline situation at the time. The one-hour tape-recorded interview took place in the principal's neat and relatively spacious, carpeted office. The office decor displayed a quality which was more modern than what might have been expected within a school of that vintage. During the interview, the principal sat behind his desk, which not only faced the wall but was pushed against it. The interviewer sat in a chair which was beside the desk.

The school had a long and tortuous history. It had once been rebuilt after a fire and it presently included a number of subsequent additions. It was situated in a relatively economically depressed working-class area of the city. The population of "just under five hundred" students were in kindergarten through grade nine. One-third of these students were in the elementary grades and lived within walking distance of the school. Most of the junior high school students were bused to the school from adjacent communities within the city because of limited or nonexistent junior high school accommodations in their areas. The staff of the school included approximately forty teachers and support personnel plus a principal, two vice-principals, and a half-time counselor. One vice-principal worked at the elementary level while the other worked at the junior-high level. The principal had no teaching responsibilities. However, the principal stated that "every other year, by choice, I did [teach], and I miss not having that experience this year, although I found it very difficult to do both." The respondent intended "to get back into it a little bit next year just to get to know the kids, especially the junior high that are bused in."

The principal had over twenty years' experience as a school-based administrator, being an "assistant principal for three or four" years and a principal for the remaining time. He had been principal of the then current school for five years. Much of his experience had been at the elementary level, with the exception of several years as a central office consultant and a several year involvement with the native education program at the junior high school level.

Personal Characteristics

Although the principal answered the questions posed by the interviewer candidly and without reservation, he volunteered limited information about his personal characteristics until he was directly asked to describe himself. The

respondent stated that "I think I am fair, I think I am consistent, I think I'm open-minded, and I think I am honest and realistic." The respondent believed that "people see that and they say, 'Well, yes, he's pretty fair. He's going to give my kid a fair shot.'" The respondent also believed that the parents trusted him "to get all the information" and get back to them acting in a fair manner and that such trust made his "life a little easier." According to the respondent, "if they can't trust me, if they can't feel that I'm fair, and if they can't feel that I am concerned about their child, then I probably shouldn't be in this position, because I think it is a position of trust." The respondent attempted to foster such trust by always treating the parents and students with respect, following up on a parent's concerns or problem situations, and by keeping the parents informed about the progress of his investigations and deliberations. The respondent revealed that "I think they trust me . . . I will do the best I can."

Besides engendering trust, the respondent indicated that he had undergone personal growth and development over his years of experience. The respondent stated that he is "more confident, no question" and that his "self-concept" and "self-esteem" were bolstered with the realization that "I've done the right things in my life, and I know I have because parents have told me or I've seen the results with kids." This acknowledgment and positive reinforcement for his actions, procedures, and beliefs has enabled the respondent to "build on that basis . . . on the success basis." Consequently, levels of self-confidence and self-assurance have increased, enabling the respondent to view himself and his actions in a more positive light. The respondent originally believed that he would be a real failure if he "didn't have all the answers" or if he "didn't solve everything just perfectly." These views have been replaced by a more realistic belief that "if I do everything I possibly can and a parent understands that, hey, I can make a mistake; please understand that. Before I may not have ever wanted to admit to that because principals aren't supposed to make mistakes." By admitting an

error, an individual takes the first steps to resolve the conditions which fostered that error without entering a detrimental emotional state.

The respondent gave another example of the personal growth which he had experienced when he stated: "I think the biggest change that occurred with me, personal change, is that I buy myself a little more time than I used to. When I was young and learning the ropes, as it were, I assumed that I had to jump immediately to every little situation, and that was just driving me nuts; it was killing me." Once again, experience and possibly increased self-confidence enabled the respondent to alter behaviors which produced premature action and emotional stress. "Now I'm very comfortable with the fact that if I don't finish this situation today, that's fine; nobody's going to die over it," the respondent stated. If the situation involved parental concerns, the respondent would call the parents in question and tell them that he had not quite completed what he had planned to do, apologize, and say that it would be attended to the next day. In the past the respondent would have experienced a more emotional state, as exemplified by the statement: "Ten years ago I would have never done that; ten years ago I would have been sitting here very anxious." Now the respondent takes the position that "I like to buy myself some time and to know that I may not get everything done in one day." In taking more time, the respondent is able to gather more information, be more reflective about the present situation, and eliminate emotional stresses which may be detrimental to his physical and mental well-being.

In summary, the respondent identified a number of his personal characteristics. Through his experiences, he also hoped that he was "always growing in wisdom and knowledge." Growth in self-confidence and self-assurance, with a reduction in levels of emotional stress, were revealed. This growth coupled with his values or "faith base" affected his decisions. The respondent believed that "to be an effective administrator, to be a good administrator and to make appropriate decisions you have to want to be an

administrator for the sake of being an administrator" rather than for the extra money or the prestige of the position. The respondent suggested that "you don't jump into it just because it's a status role or whatever; I think that's an injustice to the position and to the children and the staff of the school." The respondent emphasized that "you have to love kids; you have to really believe that you can make a difference in their lives."

Ill-Structured Decision Situations

A number of decision situations were described and discussed during the interview. The respondent believed that newly-presented student discipline situations, especially those involving irate parents, were ill-structured "because sometimes we're flying by the seat of our pants in typically a situation like this [a discipline situation]." According to the respondent, the challenging aspect presented by these situations is the determination of what had actually transpired and who was responsible for not only the various actions but also for the instigation of those actions. The respondent stated that "it's very important to check out all the angles because I could shoot myself in the foot if I'm disciplining the wrong child for the wrong reason." The person professing to be the victim may well have been the antagonist. The situation which is being presented by those involved may well be different than what had actually transpired. The respondent was concerned that an incorrect assessment of the events might serve to aggravate the situation and reduce his own creditability.

Irate parents calling the school presented another source of ill-structured decision situations which were usually related to a student discipline matter. The respondent believed that in many instances the parent's concerns

> are more deep rooted than the actual little incident. It may be that they've had some problems in the house, or it may be that they've just lost their job or they just lost their money or whatever, so they get a little frustrated about their own lives.

The respondent did not personalize the irate comments from these parents but attempted to understand the situation from the perspective of the parent's possible life story. The potential volatility and apparent immediacy of such a situation contributed to its ill-structured character.

On the other hand, the respondent believed that longer-term concerns relating to students tended to result in more structured decision making although "not necessarily less difficult." The respondent described such situations as:

> We know that there are long-term decisions that have to be made. A child maybe needs a special place in a special program, perhaps at times a change of location, whether it be a child coming to us from another school or a child from our school having to go to another school; just for, maybe there is a personality problem, or maybe a new beginning is required. But these again aren't short-term things; these are long-term things, and I think the longer the term, the more structured it can become.

In the opinion of the respondent, the greater time available to make the decision contributed to increasing its structure.

Besides these situations, when asked if the retention of students, especially at the elementary level, could be an ill-structured decision situation, the respondent stated that such situations could be very structured since extensive assessments have been conducted and documented. When the respondent was asked if decisions regarding suspected cases of child abuse in the home were ill-structured, he stated that such situations were well-structured since "we are by law obliged to do something if there's any question about it." In further describing this situation, the respondent stated that "it's an easy decision for us, because then all we have to do is contact the outside agency and say, 'This is what we suspect,' and they take over. It kicks in, and it works well after that." The respondent maintained this positive outlook even though he had previously been challenged by a angry parent in a case of suspected child abuse. In describing the telephone conversation with a parent, he stated:

> "What the hell are you doing," he was a native guy, "reporting me?" I said, "I'm sorry, I am not going to discuss this with you." I said, "Were you told that I called?" and he said, "No, but I know." I said, "Well, perhaps I didn't call."

The respondent contended that the outside agencies are very good, but "parents aren't stupid either."

In summary, the respondent believed that ill-structured decision situations were ones which suddenly presented themselves and demanded a rapid resolution. These situations usually involved students who would require discipline with representations from an irate parent. Other decision situations could also be difficult. These latter situations, such as the retention of students, suspected child abuse cases, and determining teacher redundancies, while difficult, were generally not ill-structured in the opinion of respondent D.

The Process of Making a Decision

The respondent elaborated on the processes he used in making decisions under ill-structured decision situations. The decision-making processes discussed were primarily within the context of student discipline, especially instances involving irate parents. The respondent revealed that his decision-making processes occurred within the parameters of his values, morals, and religious convictions. In commenting on the importance of his convictions, he said, "I think my faith base has a lot to do with my decisions." Also "having had a family and children" as well as "all those life experiences contribute to my [value] base." The respondent revealed that his experiences had caused him "to grow in wisdom and knowledge" as well as having a profound effect on the manner in which he interacted with children. As well, his experience base influenced how he approached the various decision situations which were continually being presented to him.

From his value base, the respondent functioned with the objective that, when "whatever decision you're making is the best one for the kid involved, the kid is going to grow from it and that his dignity is left intact." To strive for such an objective, the respondent contended that occasionally one would have to take a course of action which was different than that prescribed by policy manuals and regulations. He stated:

> I hope that the moral base, the values, I hope that they are always ahead of the book, because the books have answers, but they don't apply to individual cases when you know your kid and you know where he's coming from; you might have to bend the rules of the book a little bit.

The respondent attempted to resolve particular discipline situations in a manner which enabled the students to accept responsibility for their own actions, promoted their personal growth, and maintained their self-esteem. The respondent explained:

> I know that's another good Barbara Coloroso-type statement, but I do really believe it. You've got to leave the kid's dignity intact and say," Okay, from all I know, this is what I believe is the correct decision, because there has to be a consequence for the behavior, and this kid's got to learn from that as well.

Besides reacting to newly-presented situations, the respondent attempted to prevent anticipated situations. He stated: "I think where we try to be proactive to have structures in place to hopefully avoid students getting themselves into situations where we have to discipline or we get the irate calls and so on."

The respondent was asked to describe the processes which he would use upon receiving a telephone call from an upset, irate parent. He said his initial reaction was to "calm them down" and say to them, "Now, tell me exactly what you know" or "you invite them in, you say, 'Well, look, come on in, and we'll have a coffee and talk about it.'" The respondent believed that the parent has to be assured that he would do something because, if he were to say that the situation "was looked at and whatever was done was done, it's finished, thank you," then he would have a "fight and I've got a parent who will storm in here in ten minutes and say, 'Listen, you S.O.B.' and threaten

to take their kid out, or whatever." With an underlying concern to prevent an escalation of the situation, the respondent would calm the angry caller, reassure the individual that he would investigate the situation, and also assure them that he "will get back to them." He stated that "if I am going to deal with it [the situation], then I have to deal with it right, and I have to take the time to do it" because "if a person tries to do it too quickly or react too quickly, there's a risk of shooting yourself in the foot, and it's not worth it." The respondent believed that he had to look beyond the presented situation and "try to gather all the information" pertaining to the situation and the individuals involved so that he wouldn't accuse the wrong individual or make the wrong judgment.

In attempting to gather "all the information," the respondent did not restrict himself to interviewing the students who had observed or had been involved in the incident. He also had discussions with the assistant principals, the counselor, and the teachers about their possible interactions with the student or the parents of that student. The respondent said that he would ask others such questions such as, "Have you ever spoken with this parent? What sort of reaction have you received? What have you ever told this parent about the kid? What can you tell me about this kid?" In describing his objective, the respondent stated that "I'm trying to get as much input as I can because I may not know the kid very well or I may not have spoken to the parent before." By posing these questions, he attempted to develop an understanding of the nature and reactions of each of the involved individuals, whether they be students or parents. Such knowledge enabled the respondent to better comprehend the presented situation and to think of methods which he may use in speaking to each of the individuals.

The respondent believed that "they [parents] assume that I know everybody and everything about everybody, and that's fine for them to make that assumption, and if I'm going to try to deal with somebody reasonably, I do have to know what I'm talking

about." He again emphasized that one should not "jump to conclusions" and should "make sure that you get a real good feel for what's happening, get the information, get all the information." In further describing his decision-making process, the respondent stated: "I've got to do my homework so they [parents] don't sense that I'm just making motherhood statements or just talking through my hat." The respondent not only had to be knowledgeable but also had to appear to be knowledgeable.

After the information had been gathered and reviewed, the respondent disclosed that "the second call [to the parent] might be a little tougher, because I might find that her child really did do or say something wrong." The respondent indicated that he would present the information to the parent with any admissions obtained from the child and others, suggesting to the parent that he or she may have received only one side of the story. He believed that most parents were "most accommodating" once they were apprised of the results of his investigation.

However, the respondent was prepared to make a decision which was inconsistent with the views of the complaining parent. He explained that he would call the parent and say, "This is how I view it [the situation], and this is what I've learned, and as a result this is what I'm going to do; I'm sorry if you're not happy." The respondent was confident in the processes which he used in acquiring information and making his judgment. He also believed that the parents trusted him to be fair in resolving decision situations.

The respondent further speculated that some calls from irate parents may actually be motivated by factors within the parents' personal lives rather than the issue which they presented. He gave two examples to support his speculation. In outlining the first example, the respondent said,

> It might be that a mother was in the bingo hall all afternoon and lost money playing bingo. Her kid comes home with a cut on the hand. "Well,

> how come my kid got cut? How come I didn't know? And how come, how come, how come, how come? Because you're a bunch of jerks; you're not looking after my kid" and all this kind of stuff.

In the second example, the parents were called to inform them that their child had injured another child. The respondent described one of the parents' response as, "'Well, that's your fucking problem. Just get off my case,' and bang they hang up." The respondent believed that the school bears "the brunt of a lot of other things that happen in people's lives outside" in some cases, while in other cases parents "just love what we are doing. We are a godsend because we are solving half of their problems because we are dealing with their kids."

The respondent also hypothesized that there may be a relationship between particular public announcements and the number of calls from irate parents that the school receives. He wondered if "when budget statements or announcements come out, like last night, are we getting more irate calls today because of the state of the economy and everything else?" The respondent reasoned that, since "we advertise our phone number and we invite people to call us any time" and that, as a "very accessible . . . very public institution" the school was "pretty easy picking for people who want to dump on us or dump on something." The respondent was aware that occasionally other factors affected an ill-structured decision situation rather than only those which he had presented. In summarizing his response to ill-structured situations, the respondent stated that "I always try to keep a balance, not to overreact to threats either, because some parents are doing that too just to push you."

Besides the situations which developed from calls from irate parents, the respondent was asked to describe his actions when he was confronted with other ill-structured decision situations. Without hesitation, the respondent indicated that he had "always had a couple of mentors" with whom he would consult. These mentors were

either a "colleague that's in the schools [another principal]" or "a senior admin. person." The respondent sought their thoughts and suggestions about a particular situation. The respondent speculated that he would consult less frequently with other principals since there were very few principals who had more experience in the principalship. Although he believed that in the past such consultation with other school administrators had helped him "a lot," he now seemed reluctant to ask another principal, who had less administrative experience than himself, for advice or assistance. With his extensive administrative experience, the respondent may have believed that he had expertise and wisdom of a mentor, making it difficult to seek advice from individuals whom he felt he could be mentoring.

Besides consulting other principals, the respondent also consulted with his area superintendent. He did this to obtain his views on a particular situation, as he stated: "I'll phone him and I'll say, 'Look, I got this situation. What do you think?'" or to keep him informed of issues relating to a particular decision if he had the sense that the parent may not be totally accepting of the decision. In the latter case, the respondent would usually talk to the area superintendent's secretary with a warning that the parent may be calling about the decision. The respondent maintained that it was very important to keep the area superintendent informed, "Because if I do screw up, then they're the next people that are going to get calls, so he better know what's going on, because I don't want to be surprised and I don't want to surprise somebody else." With such consultation, the respondent wanted to prepare the area superintendent for the presentation of a potentially difficult situation as well as to protect himself from any negative effect of making an error and placing the area superintendent in a difficult position as the result of that error.

Besides these consultations, the respondent also consulted internally with his assistant principals on a regular basis to discuss what has been transpiring during the

day or week, and to facilitate planning. The respondent also on a rare occasion consulted his wife on school issues since "sometimes she has some good, down-to-earth, female perspectives." The consultation process not only enabled the respondent to obtain a variety of views and ideas but encouraged reflection upon one's own beliefs and their relation to the newly-presented ideas.

The respondent also emphasized that "you have to" reflect upon situations. He revealed that "driving home" and "after school" were the times he used for reflection. He attempted to restrict his reflections while at home since he felt that in order to function effectively he needed to take time for himself and his family rather than taking time at home to reflect on school matters. He stated that "I certainly try to avoid taking a lot of it home with me. A person needs that break; you need that break."

In summary, the processes used by the respondent in making decisions in ill-structured decision situations were greatly influenced by his values, morals, religious convictions, and the wisdom and knowledge he gained from his experiences. The respondent focused his descriptions of his decision-making processes on those situations which involved irate parents, especially relating to student discipline. The respondent gave these parents the opportunity to voice their concerns, attempting to assist them to reach a calmer state and thereby preventing the situation from escalating. He assured the parents that he would investigate the particular incident and that he would inform them of what he had learned. He then attempted to obtain as much information as he could about the incident and those individuals, students, and parents who were involved in the incident. The respondent used his records, students, teachers, assistant principals, and the school counselor as sources of information. He frequently emphasized that he must take sufficient time to gather and consider the information in order to avoid making an error in judgment and the wrong decision. The respondent made a decision with the objective of achieving what was best for the student, after

carefully considering the information. He subsequently informed the parents of his findings and the decision which he had made. If the decision was contrary to the parents' expectations, the respondent would appraise the area superintendent of the details to prepare him for a possible appeal from the parents.

The respondent also disclosed that he was aware that the actual situation or concern of the irate parent might have been different than what the parents had presented to him. The respondent believed that occasionally factors unconnected with the school may have contributed to a parent's anger and motivated their call of complaint to the school.

Besides these situations, when the respondent was presented with decision situations in which he was uncertain as to the appropriate course of action, he historically sought to consult with a number of individuals, other principals, or his area superintendent, whom he referred to as mentors. As he became more experienced than most of his colleagues in the principalship, he limited his external consultation to his area superintendent.

Relationship With Area Superintendent

During the interview, the respondent made reference to his interactions with the area superintendent. He revealed that, as his career as principal was developing, he always had "a couple of mentors," including the area superintendent. Being able to share ideas with these mentors, and learn from their experiences, greatly assisted the respondent to fulfill his administrative responsibilities. As he became more experienced, he began to assume a mentorship role with other principals and to have a more limited interaction with the area superintendent.

Gradually, the relationship between the respondent and the area superintendent had altered to primarily one of the principal providing information to prevent the area superintendent from being surprised by evolving issues or telephone calls from irate parents. However, the respondent believed that, on occasion, he would require the area superintendent's "approval on a decision . . . sometimes his blessing," especially if his decision was one which "the parent wasn't going to be totally happy with." Under such conditions, the respondent felt that his decision would "be influenced by what he [the area superintendent] is going to have to say." In developing his explanation, the respondent disclosed that in the case of moving a student to another school or out of school completely, for example, he was compelled to inform the area superintendent of his intentions. The respondent said, "I have to inform him, I know I do, because I don't want a call-back after the parent calls him and he [the area superintendent] says, 'What the hell are you doing? We're going to keep the kid." Principal D then confirmed that "Yes, there are definitely times when my decision is influenced or impacted by what he [the area superintendent] may or may not agree with or support." The respondent was of the opinion that the area superintendent acted as a "check" on the performance of the principal to prevent any abuses of power or position. He said, "There has to be a check somewhere along the way, and I agree with it but I agree I have to have some freedom to make decisions too. And I'm satisfied that we have that in our district."

Summary

Principal D, the fourth principal to be interviewed, appeared relaxed throughout the interview, answering the researcher's questions in a candid, thoughtful, and reflective manner. He described himself as a fair, consistent, open-minded, honest, and realistic individual who treated all individuals with respect. The respondent revealed that he had been able to modify his unrealistic and emotionally detrimental

expectations for his own performance. He was convinced that his experiences as principal had fostered personal growth and development which not only enhanced his self-confidence but also his self-esteem. The respondent also emphasized that it was essential for the parents to have a principal whom they could trust. He believed that he was trusted by the parents, especially in resolving decision situations.

In identifying ill-structured decision situations, the respondent primarily focused on emerging student discipline situations involving irate parents. He contended that other decision situations, although at times very difficult, were somewhat more structured. Among these more structured situations were, in his opinion, the special placement of a student, the retention of a student within a grade level, teacher redundancy, and dealing with suspected child abuse situations.

The respondent's decision-making processes operated within his well-defined personal philosophy developed from his values, morals, and religious convictions established through his educational and life experiences. When presented with emerging and possibly volatile demands for a decision, he attempted to reduce tensions and prevent the escalation of the situation by giving an opportunity to those involved to share their concerns. By listening to these concerns and acquiring information from a variety of sources, the respondent attempted to develop a thorough understanding of the circumstances affecting the situation. Occasionally, the respondent consulted with other principals and the area superintendent in preparing to make a decision. From his experiences, the respondent was also aware that at times other factors contributed to a parent's anger rather than the conditions which the parents were presenting.

The respondent indicated that his decision-making processes were influenced by his area superintendent. When the respondent was starting his administrative career, he viewed the area superintendent as one of his mentors. Presently, the

respondent's contact with the area superintendent was primarily to provide information to prevent the area superintendent from becoming surprised at receiving a telephone call from a parent unhappy with the principal's decision. The respondent's decisions were also influenced by his perceptions of the level of support he may receive from his area superintendent for a particular decision.

Case Study: Principal E

Principal E was the fifth principal to be interviewed. The one-hour interview was conducted in the principal's office during the school day. The office was uncarpeted and sparsely decorated with the principal's unpretentious, somewhat cluttered desk occupying the center of the room. On the desk upon a stack of papers was the book *Living, Loving, and Learning,* by Leo Buscaglia.

Although the principal was prepared to leave the office door open during the interview, the researcher closed the door to prevent the sounds from the adjacent general office from adversely affecting the future transcription of the tape-recording. Throughout the interview, the respondent sat behind his desk facing the researcher.

The principal, a large and muscular man, was casually dressed in rugby pants and shirt. His manner was outgoing and very sociable. He answered the researcher's questions candidly and without hesitation. The respondent appeared to be well-acquainted with the school and its clients since he was completing his third year as principal of that particular school. His previous administrative experience included the principalship of two other schools and the assistant principalship of still two other schools. These schools were situated in various locations in the city, ranging from the inner city to wealthy or affluent neighborhoods. The respondent stated that

"administratively, I've been around. And I've been in virtually all of the different socioeconomic areas."

At the time of the interview, the respondent was the principal of a school which included kindergarten through grade nine. The school was in an area of the city which the respondent described as "socioeconomically depressed," containing "a lot of low-cost housing" and "a lot of people on social assistance." He added that "there are some small pockets of wealth that are to the east of us, so we do pick som kids up there." The respondent further characterized the community as "very mixed culturally" with "somewhere between twenty, twenty-five different nationalities, from native to Spanish to El Salvadorian and Colombian and Portuguese and Polish, Italian, the whole range." He believed that the school was "considered to be a rough school." The scope of the respondent's administrative experience may have contributed to the development of an educational environment appropriate for such a diverse client group.

Personal Characteristics

The respondent was asked to describe his own personal characteristics, which he perceived as being beneficial in resolving ill-structured decision situations. He detailed a number of traits and explained that many of these attributes had developed as a result of his various experiences. The respondent believed he was very patient, understanding, and caring. He stated that "I never used to be that way [patient], but when you get into a city centre school and you see everything that's going on, you learn to be very patient, you learn to be very understanding, you learn to care for others." His experiences in the city centre enabled the respondent to acquire the understanding that occasionally irate parents use an incident which has occurred at the school, as provocation to vent their built-up personal frustrations. He explained that "in a lot of cases, parents get upset because their egos have been bruised, so they need to feel safe;

they need to have somebody that they can yell at and not have that person yell back at them." The respondent also attempted to mentor his assistant principal to reach a similar understanding in a manner similar to the way in which he had been mentored by others. He described this process when he stated:

> My assistant principal, who's just a wonderful, wonderful person, had to learn that lesson, and I said to him, 'You know, they're going to yell and scream and do everything like that, but you know what? That's a compliment, that's a compliment, because they feel safe, they can unload, and they know you're not going to yell back.' I said, 'So don't ever take it personally, don't ever take it personally. Look the other way: They feel comfortable enough to do that. If they were afraid of you, they probably wouldn't come into the office and yell at you, but they feel comfortable with you, they yell at you, and let them go!'

On a number of different occasions during the interview, the respondent emphasized that, when potentially ill-structured decision situations were emerging, the circumstances should not be taken personally but, rather, viewed in an objective manner with a degree of detached calm. The respondent stated: "No, I don't take it personally. I would have maybe fifteen years ago, I would have taken it personally, but no." The respondent also revealed that ten years ago, if he was confronted with a parent who was yelling, he would have personalized the situation and ordered the parent to "get out of my office now!" Subsequently, the respondent recognized that such action might further antagonize the parent and potentially make a difficult situation even worse. He believed that the parents may feel that "they've failed, and that hurts, and they've got to yell at somebody." The respondent explained that, after a confrontation with his "very skilled" principal while he was the assistant principal, he accepted the operating belief: "Don't take it personally, because it's not." The respondent explained:

> I use to call him "The Ice Man," and one day we had a confrontation--and we were friends--but I went in to him one day. I'd just had it, and I went in to him and I said, "If you don't show some emotion soon, I'm going to pack my bags," and he said, "You're telling me you don't think that I feel the same kinds of things that you do?" He says, "I do, but what good does it do me? I could fly off the handle." He says, "What am I accomplishing? Nothing. It gets nowhere. So I'd rather change the things that I can

> change and not worry about the rest." And I thought about it and I said, "He right. What's the point?" . . . "Don't take it personal, because it's not." So I operate that way.

By attempting not to personalize events, the respondent expected to reduce his levels of stress and emotional reaction. He began to realize that stress and highly emotional reactions have little impact in reaching a resolution. In another incident while at the same school, the respondent was motivated to spend less time thinking about school events and conditions as a result of a medical concern which occurred while he was the assistant principal of an inner-city school. The respondent revealed:

> You know, I used to take it home with me all the time, I used to take it home with me all the time, and when I was at --------- School I had to undergo a complete physical, because my arms would actually go dead on me; I couldn't feel them. I've got a really good doctor; she's just a fantastic gal. And she said, "Well, you're crazy," and I said, "You try to be in that environment, and see if it doesn't affect you," and she says, "Well, if you want to keep working in that environment and you want to do those kids some good, you'd better develop a little thicker skin, or you're going to be dead very quickly." So that kind of spooked me a bit, so I backed off a little bit. You back off a little bit and you try not to think of it, but you take some of it home with you. You can't get away from it. You just cannot shut off and leave it here; you take some home.

Even though he had a number of personal challenges, the respondent described this experience at the inner city school as "probably five of the most enjoyable years I ever spent, and a real learning experience."

At times, the respondent's children acted as a barometer of his emotional state. The respondent commented that "they'll say, 'Stay out of his way tonight,' or they'll say, 'Gee, Dad must have had a real good day today.'" The respondent agreed with his children and stated that he was trying to reduce the amount of time and emotional energy spend ruminating upon particular school situations. "I'm learning to leave more of it here [at school] and come in and deal with it later" the respondent disclosed.

Evidence of his personal stress and the considerable time he had spent thinking about various interpersonal issues seemed to reflect the respondent's great concern for the development and welfare of students within society. He believed a general increase in permissiveness was making life even more difficult for many students. This principal believed:

> These kids want direction, they want discipline, and we're letting them down, we're letting them down. There's this need--and I know why: It's because we love our children, but there's this need to make sure that the child is happy. That's not what life's about. Life involves being unhappy sometimes. We can't abandon these kids by saying, "Well, do what you want, as long as you're happy," and parents struggle with that.

The respondent further articulated his philosophy when he described the statement he presented to the parents the night before. He told them:

> The biggest injustice we do to our kids as parents is to constantly rescue them. We need to allow children to accept the responsibility for their actions. You need to believe in us, and you need to support both us and you child. We do them no favors by allowing them to escape consequences. Just as you praise them for success, so must you allow them to experience the consequences of poor choices. Life is a series of choices, and the consequences right now are relatively mild compared to those consequences that occur later on in life. That's how you go about supporting your children. School's hard work. It requires motivation and effort. Our goal is to try to help students to become self-directed, self-motivated, and self-disciplined. Lack of effort and motivation is the single greatest factor involved in failure, not only in students, but in society at large. And discipline: You've all heard the horror stories and read them in the Journal about lack of discipline in our schools. That may the case elsewhere, but that is not the case at ---------." I tell them, "We paddle upstream, not downstream. We paddle upstream."

The respondent fostered a disciplined school environment as a model for students to become more self-directed, self-motivated, and self-disciplined. Students were expected to accept responsibility for the consequences of their choices and actions. The respondent firmly believed that the parents would say, "I want my kid to have some values, I want my kid to have some morals, I want my kid to have some direction, and I want my kid to have an education." He was convinced that the educational program at

the school would achieve the parents' objectives. The principal once again emphasized, "We have some very firm beliefs; I'm staying with them."

Although he fostered a school environment which was well-disciplined, the respondent believed that it was not dictatorial. In fact, he viewed the dictatorial environments created by some principals as being counter-productive and anachronistic. He stated that "I've seen some good kids get messed up because they've gone to some principals that are still living in the Dark Ages, 'My way or the highway,' that kind of thing." The respondent contended that such a philosophy "just doesn't work any more" since "you lose your effectiveness" and "teachers won't work for such principals." In fact, he believed that those principals who viewed their position as "a powerful job, a power trip . . . get themselves into a lot of trouble, a lot of trouble." On the other hand, the respondent realized that many of his staff members were very skilled in areas were he had less expertise. The respondent said, "I think I just have a skill of being able to recognize that there are some really good people out there, some people who know another facet of education better than I do, and I'm smart enough to realize that and that's why I'm sitting here [as principal]." Not only the school but the respondent himself benefited from the skills of those around him. Through his recognition and utilization of the skills of the individuals reporting to him, the respondent was confident that he was not dictatorial in administrating his school.

To confirm his impressions of the respondent's personal characteristics, the researcher suggested to the respondent that despite showing "a lot of bravado, a lot of this is the way it is," he was a "very caring person." He replied, "Absolutely. I think you described it just right." In further describing himself, the respondent said, "I'm more the huggy kind of person, but I can be very aggressive; I can be incredibly intimidating." The respondent believed that he used intimidation very seldom and only under conditions where he or a staff member was being abused by a parent, even after the

parent was given the opportunity to discuss his or her concerns and calm down. He stated that "the caring person is always there until parents threaten us. I will not allow a parent to think they can intimidate me." The respondent seemed to exhibit less tolerance toward individuals who continued to be unreasonably belligerent than he did toward those initiating a confrontation.

In summary, the respondent believed that many of his personal characteristics were developed through his previous experiences as a school administrator. For instance, he assumed that he became very patient, understanding, and caring as a result of his activities as assistant principal of an inner city school. The respondent attributed a significant portion of his development as an individual and an administrator to the mentorship he had received from his school principals and other district administrators. He subsequently attempted to be a mentor for assistant principals in schools where he was principal.

The respondent had learned that it was important to attempt to remain calm, objective, and detached in very demanding and difficult situations. He attempted to avoid taking events personally and emotionally. Concerns about his health and the suggestions of his physician motivated the respondent to try to reduce his stress, emotional reaction, and time spent ruminating upon evolving situations or conditions affecting the school. He also began to understand that occasionally situations presented by confrontational parents may not be the actual reasons for their expressed hostility. Conditions which were affecting their personal lives at times contributed to aggressive attitudes.

Through his manner and actions, the respondent presented the image of an individual who was very self-confident. He actively applied his well-defined personal philosophy and value system to the operation of the school. He believed that students

would become more self-directed, self-motivated, and self-disciplined if they were provided with an environment which emphasized discipline and if they were required to accept responsibility for the consequences of their actions. In fostering such an environment, the respondent believed that he was not dictatorial. He supported this assertion by indicating that he relied heavily on the expertise of his staff members. He also believed that a good staff was a significant factor in being a good principal. The respondent's support for his staff was confirmed when he indicated that he could be aggressive and intimidating if he or a staff member was being abused. Besides these behaviors, the respondent likened himself to his father in being a big but a gentle person.

Ill-Structured Decision Situations

The researcher defined an ill-structured decision situation as one in which the decision maker may not be sure of the nature of the situation, the objective to be achieved, or the available alternatives. Innovative and creative solutions were required to resolve the situation. The researcher subsequently identified a number of contrasts with well-structured decision situations as a means to promote understanding of the terminology. The respondent was then asked to describe examples of decision situations which could be ill-structured. After some hesitation, the respondent suggested a number of possible examples. As he gave his examples, he indicated once more that he was experiencing some problems with the definition. He wondered about the "the difference between ill-structured and good structure" and then concluded that with a good-structured situation "you are able to identify the alternatives." The respondent then proceeded with his examples.

His first example was the potential inauguration of a new program at the school, "an IOP program." Such a program would retain students who would otherwise be

bussed to another school. The respondent wondered, "Do we encourage the Grade Sevens to go to his [another principal] school to take the program or do we try to accommodate those kids here because the parents don't want them there?" The respondent believed that the "parents are being very protective" in not wanting their children "to go to the central program because the school is considered to be a rough school. Since he refused to offer a program which was anything less than the best, the respondent was concerned about "not being given really enough time to run the program;" having a sufficient enrollment to qualify for a half-time or full-time teacher; and his limited expertise in that area. He suggested, "I guess I would consider that to be at this point in time a very ill-structured situation."

The second example of ill-structured decision situations involved "problem situations that arise when we do teacher evaluations" because of the lack of certainty in making fair judgments. The respondent indicated that the teacher may perform "beautifully" with one subject or class but they also could be having a "bit of problem or a bit of struggle" with a different subject or situation. He believed that "you take into account their personality and their energy and the whole gamut thing" in making your decision. The respondent revealed that "is a very difficult decision to make."

The third example provided by the respondent involved student placement. He indicated that "right now we've got two kids who are F.A.S., we've got two that are cocaine babies." Because of "cutbacks," two classes would be amalgamating the following year. Since the respondent was convinced that "you can't put four kids like that in one class and expect to succeed," he was concerned about sending a number of the students to behavior management classes at other schools. The respondent hypothesized, "If we are, by some stroke of luck, going to get two classes, then we will probably keep those kids, and we'll deal with them ourselves, because I think our

teachers are strong enough to do that." However, the respondent lamented that to send the children was "a difficult decision to make."

The respondent's final example of potentially ill-structured decision situations concerned issues of student discipline. Many of these situations also tended to involve telephone calls or visits from irate or hostile parents. The respondent believed that the ill-structured nature of discipline situations resulted from the identification and implementation of various strategies, with the expectation of remedying the behaviors of those students who had chronic discipline problems. The respondent stated: "Where the parent is really trying and is being very cooperative, and you always look for the next step. What's the next step? What more can we do for this kid?" On the other hand, the respondent had virtually no tolerance of parents who were uncooperative. The respondent had suggested to such parents, "If you don't like it here, don't punish yourself. Leave."

Of the four examples of ill-structured decision situations given by the respondent, the staff evaluation example seemed, to the researcher, to be the most structured and potentially one of the most difficult decisions for the principal. The respondent may have included this example because of the possible difficulty it presented rather than because of any lack of structure within the decision situation itself. Student placement was another decision situation which seemed structured to the researcher since criteria were available and could be used with the decision-making process. The inauguration of a new program had the potential to include a large level of uncertainty, especially for one not experienced with the process. Of the examples, student discipline situations had the potential of being very ill-structured since high levels of emotional reaction tends to be associated with these kinds of situations.

The Process of Making A Decision

The respondent's decision-making process was structured by his well-defined and clearly-stated values and philosophy of practice. He began to describe his approach to making decisions in ill-structured decision situations when he stated:

> I find that a lot of my decision making is based on staff expertise. I always say to them, "The reason I am the principal is that I am smart enough to realize that there is expertise out there, and I use it." I don't administer by dictatorship, so, in terms of decision making, I want input from people who are closest to the source of the problem.

In preparing to make a decision, the respondent consulted with his staff members. He had "incredible faith in the staff" and believed that such faith made his job "so much easier." He confided that his relationship with his staff was based on trust, "I trust them, and they trust me" and, if you trust somebody, then your decisions are not going "to be that difficult to make." The respondent promoted an open-door policy where "staff walk in here, and feel comfortable." He further believed that his staff members possessed their own expertise and knowledge of the background of an issue as well as personal knowledge of the individuals involved in the decision situation. The respondent seemed to take great pride in seeking information from staff members. By acknowledging their expertise and including them in his deliberations, he believed that he was acting in a fashion which was nondictatorial. Although consultation had taken place, decisions were not made collectively but by the respondent himself. Consequently, if his decision was inconsistent with his staff members' wishes or representations, then they may have viewed his decision-making style as dictatorial. However, if the two-way trust between the principal and his staff members was as the respondent had described it, such a condition of imposed authority would not occur.

Besides consulting with his staff members in ill-structured decision situations, the respondent revealed that he also conferred with his colleagues, other principals,

and other individuals who possessed particular expertise. In exemplifying such consultations, he stated:

> You check with your colleagues. You say, "Hey, what are you doing about this cooperative learning?" "Oh, I am doing this, this, and this. How about you?" "Well, I'm doing this." "Oh, okay." "What are doing about this situation?" or "How would you have handled this situation?"

Over his years of experience, the respondent had become part of a network of principals who cooperated with one another. He stated that "I think ours [his network of principals] is really good" in working together or assisting one another. The respondent revealed that he "could pick up the phone right now and phone ten, fifteen different guys and say, "How would you handle this?" and I would feel comfortable in doing that." The respondent had sufficient self-confidence to avoid thinking that asking for information or advice was an admission of deficiency or inability. He stated that "some guys, I think, might feel "well, gee, I don't feel comfortable about asking somebody because it might show that I'm weak somewhere." The respondent believed that such an approach was "altogether wrong" since, "If you don't have the expertise, phone and find out. There is somebody around that has it and all you have to do is find out who it is. Phone--give him a call." According to the respondent, it was important to acknowledge limitations in one's expertise and then to consult with those individuals who may have the appropriate expertise. The respondent described how he had consulted with various individuals regarding timetabling to achieve the contractual limitations on minutes of instruction and regarding the inauguration of a new program. He viewed such actions as a strength rather than a disadvantage when he said, "I didn't feel incompetent; I just thought I was smart enough to use the expertise that was out there." Besides consulting with his peers and individuals who possessed particular expertise, he also consulted with his area superintendent.

After the respondent discussed the use of consultation, he again described his decision-making processes in ill-structured situations, especially within the context of student discipline. The respondent was asked to identify what he would "draw upon" when presented with these situations. Without hesitation, he replied, "My past experience." It was not only his "own personal experience," but the experiences of his father which he had observed and used as a model. He elaborated: "My father was not a terribly educated man, but he had a big heart and he had a love and a care and a concern for me, and his family was number one." Given his level of interest in the welfare of students, the respondent may also have directed a concern, which was similar to his father's for the family, toward his students and possibly his staff members. In making decisions, the respondent used what he had learned from his experiences within the school environment and from other aspects of his personal life. The respondent believed that "you draw on that experience [from his principal mentor], and you use your life experiences, and you make these decisions. And sometimes you make decisions that you feel good about, and sometimes you make decisions that you don't feel real good about, so you start all over again." The respondent also shared this view with his students when he told them to "make a decision, and if it's right, great. If it's not, go back and make another one, but learn from it, and that is what I try to do."

The respondent expanded the discussion of his decision-making processes by describing situations which concerned representations from irate or angry parents usually associated with student discipline situations. "Let them get it off their chest, and then you get them every time by saying, 'Tell me how I can help your child,'" the respondent revealed. The parents were not only given an opportunity to express their concerns in a manner which allowed them to release their anger or built-up emotion, but they were also able to suggest alternative ways in which the school personnel could assist their child. The respondent found that giving the parents an opportunity to "vent

their spleen" and then asking them to "give me an alternative" tended to diffuse them and the volatility of the situation. With this strategy, the parents were given the message that the school personnel cared for their children and wanted to work cooperatively with the parents to remediate any negative behaviors. The respondent maintained that "sometimes we get so patient it hurts!" In fact, he told the parents of the children enrolled at the school that "we won't quit on your kid. You'll quit on him before we do. But there are times when we are going to make him very unhappy." The respondent revealed that "we suspend kids and bring the parents in, and you say, 'You know, it really bothered me when I had to suspend him, because I really like your son, I can't tolerate that behavior.'" In such situations, the behaviors had been the source of the concern rather than the student as a person.

On occasion the strategies used by the respondent in making decisions did not diffuse the situation nor did the parents and the respondent agree to a particular course of action. "You know, you get one or two who are always going to be unhappy regardless of what you do for them," the respondent disclosed. The respondent showed very little tolerance toward parents who did not want to work with him or the school personnel to achieve what was best for their child. In using a somewhat aggressive and intimidating approach, the respondent said that he would tell the parents, "You don't like it here, we'll have your transfer card ready for you in five minutes, and you can choose a school that meet your needs. If we are not meeting your needs, then don't punish yourself by staying here." The respondent was convinced that "where the parents are very uncooperative and everything else, there's no decision." As far as he was concerned, the parents would be told that they should move their child to another school.

In addition to these decision situations, the respondent disclosed that school secretaries may at times be very influential in affecting the principal's decision process. He related an experience which occurred when he was first appointed as a vice

principal. In describing the situation, the respondent said, "That was his first appointment as a principal, it was my first appointment as a VP, so the secretary made all the decisions; we just took responsibility for it, and it worked out great! It was terrific." He had showed his appreciation for secretaries' knowledge and abilities when he stated that "secretaries have more expertise and more knowledge than anybody will ever know."

In summary, the respondent relied primarily on past educational and life experiences in approaching and resolving newly presented ill-structured decision situations. While operating under the guidance of his well-defined personal philosophy, he did not hesitate to consult staff members who were close to an evolving situation, external experts, other principals, and central office administrators to obtain information and advice regarding particular decision situations. The respondent's caring for students and their development influenced his decision making in student discipline situations. With irate or angry parents, he gave them the opportunity to present their views as well as to propose alternative courses of action. The respondent was very intolerant if the parents continued to be belligerent and not work cooperatively with school personnel, suggesting to those parents that they could transfer their child to another school. The respondent's very self-confident nature was also reflected in the manner in which he made his decisions. This tactic may have been used as a form of intimidation to force the parents into a more cooperative posture. Additionally, the respondent alluded to the influence which school secretaries may have in the decision-making process. The respondent reflected upon his decisions during the twenty-five minute drive to his home as a process of self-evaluation and improvement.

Relationship With Area Superintendent

Throughout the interview, the respondent referred to his interaction and relationship with the area superintendent. He said, "We have a very good relationship, and I'll phone him up and I'll say, 'Listen, . . . , this is the situation I have here. This is what I propose to do. Give me your thoughts on it.' And he'll say, 'Yes, that's good' or 'Maybe think about this approach.'" The respondent was confident of the area superintendent's support and was not reluctant in consulting with him. To elaborate on the consequences of this rapport, the researcher asked, "Do you think that the relationship between the area superintendent and the principal affects how a principal makes decisions?" The respondent replied, "Oh, absolutely! If you're going to make a decision and get your ass shot off, you're not going to make the decision. There is absolutely no way, no way!" The respondent's very confident manner during the interview and in the actions which he had described may have been fostered by the support given to him by his area superintendent. The respondent confirmed this hypothesis when he stated that "if I know that he's back there supporting me, and I've got a real tough situation to deal with, then I'll deal with it, and I'll be confident about how I deal with it."

In developing an understanding of his position, the respondent used the analogy of walking a high wire. "You've got to encourage people to take risks. Like walking a high wire. As long as that net's down there, hell, you try it! If there's no net it's a whole different ball game," the respondent proclaimed. Although innovative actions and behaviors have an associated degree of risk, they also provide an avenue for the exploration of creative solutions to decision situations which are ill-structured. Through the exploration and application of innovative and creative ideas, the potential exists to extend the theory and practice of educational administration and enhance the abilities of individual administrators. As one may not walk a high wire if no safety net

was present, a school principal may not seek out creative solutions if there was little support from his superiors.

Without that support, the respondent's decision-making style may be altogether different. He revealed that "the first time he burns me, I'm dead in the water. I'll be a coward. I won't take the risks, and then I think the system is the loser for that." The respondent believed that "if you don't have the support [of the area superintendent], then you waffle, you get real wishy-washy, and you make more of a political decision, which is probably more harmful then making a wrong decision." In fact, the respondent also went on to say, "If don't have the support, you may as well pack it in; you might as well pack it right in."

The respondent further hypothesized that he may have earned the support which he had received from the area superintendent. "I think I've been an effective administrator, and they have confidence in my abilities, and therefore I'm getting that kind of support," the respondent revealed. The respondent believed that a mutual respect and a rapport may have developed between himself and the area superintendent which enabled them to share constructive criticisms. The respondent stated that "the other part of my philosophy is, if I screw up, all they [the area superintendents] have to do is tell me, 'Look, you screwed up. You should have probably done it this way,' and I can accept that, I can accept that." The respondent contended that such acceptance was not difficult since he could say to the area superintendents, "'You messed up this time,' and they will accept it. And I've done that; it's gone both ways."

In summary, the respondent emphasized that the support of the area superintendent was essential if a school principal were to have the confidence to seek creative and innovative solutions in ill-structured decision situations. He also conceded that a principal, perceived as effective, may more readily receive the support

of the area superintendent. Without that support, the principal could become very anxious and overly cautious. With the support of the area superintendent, principals would have the confidence to examine potentially innovative and creative solutions.

Summary

Principal E, the fifth principal interviewed, appeared to be a very relaxed and confident individual. Throughout the interview, his manner was very warm and sociable. The respondent described himself as a very patient, understanding, and caring person. He revealed that he had developed these characteristics as the result of his administrative experiences and the mentorship of his superiors. He actions were guided by well defined personal principles and a mission to provide students with learning experiences which would foster their growth as responsible individuals. His great concern for his school and the students with their personal challenges escalated his stress levels and caused a number of physical manifestations. In accepting the advice of his physician, the respondent attempted not to personalize emerging situations nor spend much of his time at home thinking of school problems and decision situations.

The respondent described four decision situations as ill-structured: the inauguration of a new school program, teacher evaluations, the placement of special needs students, and student discipline situations involving irate parents. Of the four examples, decision situations concerned with student discipline and the inauguration of a new program seemed to be most ill-structured. The placement of special needs students and teacher evaluation were difficult decision situations but somewhat more structured than his other examples.

In making decisions, the respondent was guided by his well-defined personal philosophy. The respondent primarily relied on his past educational and life experiences and the consultation with staff members, external experts, other

principals, and the area superintendent in preparing to make a decision in an ill-structured decision situation. The respondent gave irate parents the opportunity to voice their concerns, but expected that they would subsequently work with the school to develop and implement a plan for their child. He had little tolerance for those parents who continued to be abusive, suggesting that they could find another school for their child.

In describing the processes he used in making ill-structured decisions, the respondent alluded to the importance of his relationship with the area superintendent. The respondent believed that his ability to act in a very self-confident and a creative manner in ill-structured decision situations was the result of the support he received from his area superintendent.

Chapter 5

CASE STUDIES: SENIOR SCHOOL DISTRICT ADMINISTRATORS

The main purpose of this chapter is to present four case studies of senior central office administrators: three area superintendents and one superintendent. The analysis and interpretation of the information supplied by the respondents was completed using themes which were consistent with those used in the case studies of experienced school principals presented in Chapter 4. The transcripts were examined as to the information they yielded regarding the personal characteristics of expert or experienced principals; ill-structured decision situations; decision-making processes used by expert or experienced principals; and the principals/area superintendent relationship. The respondents in these case studies were unaware of the identities of the experienced principals who had been interviewed.

In relation to the first theme, in each case study the senior administrators were asked if they could identify school principals within their school district who were expert or good decision makers. They were subsequently requested to describe the personal characteristics of such principals, thereby enabling a comparison with the self-identified characteristics obtained from the principals' case studies. The senior central office administrators, in each case study, were further requested to expand on these representations by describing the decision-making processes which these principals used in resolving decision situations which were ill-structured. The respondents were subsequently asked to provide examples of decision situations which may be viewed as ill-structured. Finally, each case study focused upon the area superintendents' and superintendent's perspectives on a number of factors which may affect the principals' decision making. For example, Area Superintendent G discussed

three distinct topics which were identified under a separate heading entitled: The Relationship Between the Area Superintendent and the Principals, The Selecting of Principals, and Improving the Decision-Making Capabilities of Principals. This chapter concludes by reviewing the findings under each thematic heading from all four case studies.

Interviews with the area superintendents and superintendent were included within this study because of their line or supervisory relationship with the principals and the potential effect of that relationship on the principals' decision making. It was believed that the search for meaning within the hermeneutic perspective of this study was better accomplished or confirmed by accessing the senior central office administrators as well as the expert or experienced school principal.

Case Study - Area Superintendent F

The first interview was conducted with an area superintendent identified as Area Superintendent F. The one-hour interview took place in his office. As well as providing a vehicle by which the objectives of the study might be addressed, the interview also provided the researcher with an awareness of the respondent's perspectives on administration.

Principals Who Are Good Decision Makers

This area superintendent, with 28 principals reporting to him, indicated that it was possible for him to identify principals who were good decision makers. In describing how he established his criteria for this identification and selection, he stated that "if you were to look at research literature on problem solving, I think it's quite clear what it takes to solve a problem, and because of that I think we can identify good decision makers."

According to this area superintendent's argument, good problem solvers are good decision makers. For most people the term "problem" includes connotations of uncertainty, perplexity, and difficulty. Decision situations, which require problem solving, are generally not routine or well-structured with established procedures and rules of operation associated with their resolution. Consequently, a problem might be described as an ill-structured decision situation. From this context, an interpretation of the area superintendent's argument is that good problem solvers are good decision makers in ill-structured decision situations.

Since ill-structured decision situations can be characterized by uncertainty, the respondent's statement that "it's quite clear what it takes to solve a problem" has limited meaning in situations where the complete meaning of the situation is unknown; where many of the available alternative options are unknown; where the outcomes of the alternative options are unknown; where the optimal procedures are unknown; and/or where the desired outcome is unknown. The characteristics of the decision maker and the unique, novel, and creative processes which may be used are of significant interest under any of the aforementioned conditions, whether they occur singularly or in combination. In describing the characteristics of principals who are good decision makers and the process which they use, Area Superintendent F recognized that the literature was not the only source in identifying "what it takes" to solve a problem or resolve an ill-structured decision situation.

Characteristics of Principals Who Are Good Decision Makers

Area Superintendent F identified a number of characteristics by which he would describe principals who were good decision makers. He stated his belief that good decision makers are "those that are presented with a problem and are able to solve the problem." His confidence in the reliability of his personal identification of principals

recognizable as good decision makers was found in his statement: "Those that are able to, indeed, make decisions that would more often be right decisions than wrong decisions."

In analyzing this position, the criterion used to determine if the decision was right or if the problem was solved becomes of interest. The area superintendent revealed a component of the criterion, which may be described as politically satisficing, when he stated that "an administrator deals with people all the time, and you're going to have to solve problems so that no one in that decision-making process is harmed or loses a lot of face and so on." He illustrated this point when he stated that "a teacher makes a mistake, a problem is solved, and the teacher doesn't lose face." In his opinion, resolving situations where a teacher had made a mistake required leading the teacher "through the resolution of the difficulty without, as I've said, losing face or complicating the situation more than it is already complicated." Implicit in these descriptors, it would seem that knowledge of the staff and the situation as well as the use of judgement and tact in interpersonal relations are characteristics of a principal who is a good decision maker in the view of Area Superintendent F.

Subsequently, the respondent confirmed that, among other traits, good interpersonal skills are among the characteristics displayed by principals who were good decision makers. However, he provided the caveat that the literature provided little direction as to what is meant specifically by the term "good interpersonal skills." He indicated that "those people that can deal effectively and efficiently with people" were probably those who exhibited good interpersonal skills and were also good decision makers.

In referring further to the principal's knowledge of the staff and situation, the respondent explained that "it's somewhere in the middle that you have to have the

interests of the corporation or the school at heart, and you also have to consider the needs and interests of the people that are really going to be the people that carry out your objectives." Accordingly, the principal would be required to know the needs and interests of the staff in order to develop procedures to accommodate both their interests and those of the school. The respondent also confirmed that the principal needs to know the parents and, although not specifically mentioned, the students. Knowing the various stakeholders is especially important when the principal is required to perform a balancing or negotiating act among the conflicting needs and interests of the various people or groups.

To function under such conditions, the respondent declared that "the strong decision makers are those that feel more confident in themselves as people, feel more confident in the support they might get from central office." Although confidence may be considered to be part of personality, it may also be an outgrowth of success in past experiences. Confidence, in another sense, may also be the contributing factor which enables the good decision makers to keep the area superintendent informed about what is transpiring within the school. Since he is kept informed, the area superintendent consequently has more confidence in the principal whose past good decisions are part of his or her personal knowledge base.

In reference to good decision makers, the area superintendent articulated that "I don't really get many surprises from principals on their decisions." This may also be a function of another more fundamental characteristic possessed by principals who are good decision makers. The respondent revealed that such principals need to have a basic set of principles which are uncompromised. In his opinion, it was these principles which set parameters to direct and control actions.

In summary, Area Superintendent F identified eight characteristics of principals who were good decision makers. The principals and their characteristics were described by presenting that they:

1. made decisions or solved problems;
2. made decisions that did not harm anyone or cause anyone to lose face;
3. knew the staff, parents, and the situation;
4. possessed interpersonal skills which enabled them to deal effectively and efficiently with people;
5. considered the interests of the school as well as the interests of the individuals;
6. had confidence in themselves and in the support from central office;
7. kept the area superintendent informed of what was happening in their schools;
8. had a basic set of uncompromised principles which governed their actions.

The Decision-Making Processes Used By Principals

Area Superintendent F identified a number of processes used by both principals whom he saw as being good decision makers and those whom he saw as less skilled in ill-structured decision situations. Since many of these situations are steeped in conflict, with the possibility of increasing severity, the respondent explained that the process used by good decision makers was to reduce the potential for escalation when he stated that "the principal is forced to, I think, struggle with objectivity and try to solve the situation, I guess by, in many cases, diffusing the situation." The respondent characterized conflict situations as usually having resulted from perceived differences among individual perceptions, ideals, and expectations. Consequently, objectivity was important to understand the conflicting positions as well as the disposition of the individuals holding these positions. In the opinion of Area Superintendent F, the good

decision makers developed strategies "to lead them [conflicting individuals] through to a reasonable resolution of the difficulty" without the parties "losing face or complicating the situation more than it is already complicated." Accordingly, diffusing the situation was related to the softening of the situation or preventing the situation from becoming more complicated. The decision-making process used emphasized collaboration and negotiation.

As an example, the respondent discussed the implementation of a school board decision which the principal had "a great deal of difficulty living with" when the rationale for the board decision may have been "nothing else than political." Under these circumstances, the principal who is a good decision maker used a collaborative process to "work that through with his teachers" rather than blaming the school board or central office for the situation. In essence, the principals were able to "lead them [the staff] in that direction" and to sell the unpopular decision to their staffs.

An approach which did not affix blame further indicated collaboration between the principal and the school board or central office personnel. Communication was implicit to the collaboration between the principal and central office administrators. The respondent disclosed that "I know quite well what's going on in their schools, in the schools where I think we have good decision makers." The principals provided information to the area superintendent without requesting that the decision be made for them.

The principals who were deemed by Area Superintendent F to be good decision makers also shared information with their peers. The respondent acknowledged that groups of principals "meet for breakfast almost on a weekly basis, and that's a really healthy practice." These meetings provided opportunities to exchange views and discuss various emerging situations. According to the respondent, areas of concern were also

discussed by these principals. These concerns included, "How are you handling textbook learning? How are you handling your PAC? What's happening there?" Consequently, these principals expanded their knowledge base relating to particular decision situations involving the students, staff, and the community.

In resolving conflicting positions among staff members, the respondent explained that principals who were good decision makers "try to come up with a compromise." They fostered collaboration among their staff members. The respondent revealed that these principals may approach a difficult situation by stating that "we have a problem, let's solve it, in the terminology, collaboratively." Therefore, to have achieved a compromise through staff collaboration further illustrated an emphasis on negotiating solutions or decisions.

In the instances where collaboration, compromise, and negotiation do not lead to a decision, the principals who are good decision makers were able to make the "tough" decisions. They also provided a rational, reasonable, and intelligent basis for the decision rather than stating that "I am the principal and therefore I make the decisions."

The respondent also explained that these principals were not impulsive but took time to make decisions. Therefore, one might assume that principals who were less skilled at making decisions in ill-structured decision situations might be more impulsive.

The respondent provided insights into the processes used by those principals who were less skilled at making decisions under ill-structured conditions. The respondent disclosed that "some [principals] have to phone continually to get this decision or that decision made for them." Although a lack of confidence could be attributed to such behavior, the respondent explained that these principals may believe

that "our [the area superintendents'] support is suspect." Without a feeling of support, principals may wish to check before a decision is made rather than have a decision questioned after it is made. He further indicated that, to attempt to resolve this perception, "we have to build confidence that the superintendent is supporting them." Speaking from the principal's perspective, the area superintendent stated that "if we make a mistake, fine, check us up on that and so and so that we don't make a mistake another time, but the assurance that you're not on your own is very important." The respondent speculated that "some of our people, who are less willing to make decisions feel that more strongly than others."

In summary, Area Superintendent F compared the decision-making processes used by principals whom he believed to be good decision makers with those whom he viewed as less skilled in decision situations which were ill-structured. The principals classified as good decision makers objectively attempted to understand and interpret conditions of conflict to diffuse the situation so that none of the affected parties would lose face. In their decisions, they sought to reach positions of compromise through collaboration and negotiation. When compromise could not be attained, they were prepared to make the decision and provide the affected parties with the rationale for that decision. This and other communication also extended to their superiors as well as peers, and was indicative of their collaborative and nonisolationist posture.

On the other hand, there was a tendency to avoid difficult decisions or attempt to have them made for them by the area superintendent if the principals were less skilled at making decisions. The respondent stated that these principals made frequent contacts to have decisions made for them. At times these principals also made decisions in an impulsive manner without providing the rationale for those decisions. They exhibited a lack of confidence in their ability and believed there was a possible

lack of support from their superiors. Under these conditions, ill-structured decision situations provided significant challenges for these principals.

The Ill-Structured Decision Situation

The respondent was asked to provide examples of decision situations which the principals would view as ill-structured as opposed to routine. In replying to the respondent's inquiry regarding the nature of ill-structured and nonstructured descriptors, the researcher described ill- or nonstructured decision situations as ones to which the principals had not been previously exposed. He also included decision situations where there was no set routine, where the situation would include conflict, where the magnitude of the decision was very great, or where innovative and creative decisions were required.

Although the respondent believed that there were many such situations, he also suggested that parents were a potential source of ill-structured decision situations. The respondent illustrated that

> the ill-structured or nonstructured situations that are presented to our principals are often when a parent will come who is not particularly objective about the situation, demanding perhaps that a teacher be moved or some such thing because there's a personal conflict between the student and the teacher, at least in the parent's mind. That parent could be very, very upset and angry at the teacher or at the school, or at other students or other parents, and it is laid on the principal's desk.

The respondent found these situations "very ill-structured, nonstructured." He went on to say that "another parent might be in the same afternoon and present a whole different set of factors that have to be dealt with again." These situations included high-level conflict with definite and entrenched opposing positions. To resolve the situation, the opposing positions and personalities of those involved had to be interpreted and understood in order to develop strategies for decision making.

Other ill-structured decision situations described by the respondent were the implementation of unfavorable school board decisions, and resolving differing and polarized views among staff members. Once again, conflict appeared to be part of the characterization of the situation.

The ill-structured decision situation was contrasted with the "structured problem" or structured situation. The respondent referred to the allocation of funds within the school as a structured situation.

In summary, the respondent believed that conflict situations were especially ill-structured. He disclosed that situations which involved parents and their perceptions were a main source of ill-structured decision situations. Conflict originating from staff members and the implementation of unpopular school board decisions were also viewed as ill-structured decision situations. On the other hand, the allocation of resources among departments within the school was viewed as a structured situation.

The Area Superintendent's Perspective

The interview provided insight into the area superintendent's perspectives regarding education and the administrative procedures which needed review and affected the principals' decision making. The respondent believed that the greater interest and involvement of parents in schools and school policy provided new challenges which affected the delivery and control of education. He declared that "education is becoming much more political. It certainly invited the involvement of parents in education, the direct involvement of parents in education. We may have, indeed, created a monster, because, while I think parents should be involved, there's got to be a measure of accountability, too." Although parents are not directly accountable to the school or to the school district, in the pursuit of their goals they are accountable to their own family unit and society in general. Conflicts develop when the goals of the

parents, or the students through the parents, are inconsistent with the goals of the school, other parents, other students, or the school district. Subsequently, increased parental involvement designed to achieve the specific goals of the parents may be viewed as attempts to influence or control education for self-interest. The area superintendent emphasized that "we are in a highly political game now."

According to Roucek (1941), "politics is the quest for power, and political relationships are power relationships, actual or potential" (p. 4). As power increases, the ability to attain objectives also increases. In this context, if education is becoming more political, then there are more groups and individuals attempting to gain power and influence to achieve their objectives. The school principal is required to understand and resolve emergent situations within the limits of school board and government policy. The principal's position is consistent with the democratic perspective of politics presented by Roucek (1941) when he stated that "politics is essentially a peaceful process of reconciling conflicting interests within the framework of governmental institutions" (p. 5). The democratic perspective describes the increasing political nature of education disclosed by the area superintendent.

Area Superintendent F identified a number of areas in the relationship between the central administration and the principals which could be improved. With the large number of principals reporting to each area superintendent, regular individual contact with each principal was limited. Consequently, he speculated that "perhaps we are leaving our principals working in a bit of a vacuum." To remediate this situation, the area superintendent expected to "address, next year, all . . . area superintendents to readjust our own work priorities and workloads, so that we'd really be in closer contact on a more frequent basis in the district."

The respondent also believed that the principals would more readily make decisions if they were assured of the superintendent's support. He observed that "we

have to build confidence that the superintendent is supporting them" and "that maybe we're going to have to continue to affirm the role of the school principal, give them the authority and the responsibility to act, and make them accountable. And accountable is not going out there and overturning their decisions." The respondent advocated a collaborative and supportive interaction between the principal and superintendent which would enable learning from mistakes and producing better decision makers.

When the objectives of people are different than those of the institution or the school, and an accommodation occurs which enables the people's objectives to be attained, then a distribution of governing power may be thought to have taken place. Therefore, the political phenomenon, in the educational context, can have the purpose of effecting educational change.

Summary

Area Superintendent F believed that principals who were good decision makers could be identified by using as the criterion the qualities needed to solve problems as they have been presented in the research literature. Principals who were thought to be good decision makers made decisions, examined the feelings, were knowledgeable, had good interpersonal skills, considered various interests, had confidence, informed others, and were principled individuals. These principals made decisions objectively, maintaining the self-esteem of those involved, sought comprises through collaboration and negotiation, and consulted with peers and superiors. The decision situations which were difficult or ill-structured were seen as those involving conflict emerging from parents and staff members, as well as those occurring when implementing unpopular school board decisions. Societal changes resulted in more frequent emergence of ill-structured decision situations with a significant political component.

Case Study Area Superintendent G

Area Superintendent G was in the position of acting area superintendent. Prior to assuming this temporary position, he was a high school principal. The taped interview was conducted at his office and took approximately one hour. The interview provided insights into the area superintendent's perspectives regarding principals who are good and those who are less able decision makers, the decision-making processes they used, examples of ill-structured decision situations, and extensive discussion about relationships between the principal and superintendents.

Principals Who Are Good Decision Makers

The respondent confirmed that "through working with principals," he would be able to identify principals who were good decision makers. The respondent revealed his methods of identification and expressed some reservations when he stated that "I don't think I have the full perception because of my newness on the job, but the one thing that I've focused on all year is to try and identify each principal relative to their strengths and their style and how they operate in making decisions." The respondent elaborated by describing the characteristics of the principals.

Characteristics of Principals Who Are Good Decision Makers

The respondent identified a number of characteristics possessed by principals who were good decision makers under ill-structured decision situations. These principals were "creative in their decision making" and "confident in what they were doing" and had "a tendency to strike out and take those risks that will impact the soul of the school." Confidence may be the fundamental characteristic since it is through confidence that one frees oneself of the traditional choices for more creative

alternatives. Confidence also enables one to pursue entrepreneurial endeavors with the risks inherent in such pursuits.

Area Superintendent G believed that one's level of confidence is also associated with style. The respondent suggested that "the style . . . of the principal will determine how much risk they'll take on." Style may be described as the overt manifestation of personal objectives or possibly personal principles. The respondent related style and personal objectives to decision making when he stated that "decision making is also relative to what are some of the cornerstone objectives that a principal brings to the job, and with due recognition that each school is unique and different and serves a different clientele." Adapting procedures and methods to accommodate to the uniqueness of a school situation in order to accomplish cornerstone objectives relates to leadership. The respondent pointed out that "when you look at the qualities and the duties of a principal, you get into that whole leadership question with regards to the instructional program, the management area, the climate in the school, and all those things have different emphasis, depending upon the principal. I think that impacts how they make decisions."

The respondent revealed that "people who are willing to take risks, assess facts, and are very decisive will get themselves into some jams." However, deciding to venture into new and untested areas provides an opportunity to improve the students' educational experiences. If the venture is deemed a mistake, the opportunity exists to learn from that mistake. According to the respondent, "you can never make a mistake if you never do anything." Good decision makers include those principals who choose to accept the risks of innovation.

According to Area Superintendent G, principals who were good decision makers in ill-structured situations had a number of characteristics. These principals were

confident, creative, decisive, risk-takers, innovators, and leaders, with well-defined personal objectives or principles with a degree of "intuitive sense."

The Decision-Making Process Used By Principals

The respondent distinguished between principals who used the "art of administrating" and those who are technocratic. The respondent described the former as principals who "use a very analytical approach in assessing problems and unique responses, as opposed to always relying on handbooks and policies, tend to flourish and tend to be more responsive in those unusual situations." These principals

> don't even open the manual or the handbook, don't even open it, but they have a depth of experience, they know generally what the thrust or emphasis of what the polices have been in the past, and they work from there and judge each situation on its merits and have a sort of creative way of determining their responses.

These principals tend to flourish in unusual or ill-structured situations.

The technocratic principals "rely heavily on policy" and in an unusual situation, "when there is no policy and when there is no practice for the unique situation, they tend to scramble a little, they get a little uneasy, they're looking for help." When the situation is ill-structured, these principals tend to look to others for decisions. The respondent also speculated that "people that get themselves into difficulty in handling problems are the ones that revert back to just the set rules or procedures and don't give it that unique attention." Success in resolving ill-structured situations may require unique, novel, and creative processes and decisions.

Using a medical analogy, the respondent mentioned that principals who are good decision makers are able to correctly diagnosis the situation or problem. He expressed that "it's like a doctor doing a diagnose on a problem, and if you don't get the correct facts or the proper signals, you come to faulty conclusions, and, therefore,

regardless of the decision making process, you're going to end up with a faulty decision. So we have to differentiate between the process of decision making and making good decisions. Some people are good at it, and other people miss the diagnosis." Resolving a situation resulting from a wrong diagnosis exemplifies what has been termed as a Type III error. Dunn (1981) described such an error as "providing the wrong substantive or formal representation of a problem when one should have provided the right one" (p. 109). Raiffa (1968) asserted that "practitioners all too often make errors of a third kind: solving the wrong problem" (p. 264). Principals who are good decision makers in ill-structured decision situations make fewer Type III errors.

The decisions of the principal in the implementation of school board decisions were discussed by the respondent. Rather than saying "We have to do this because downtown said it," the good decision makers focus on the appropriateness and benefit for the school. They are able to provide reasons to support the implementation. According to the respondent, these principals would "make it developmental within the school, within the spirit of the practices and objectives of the district."

The processes used by principals who are good decision makers in ill-structured situations are characterized by Area Superintendent G as the "art of administration" rather than as the technocrats of administration. Their knowledge, experiences, and "intuitive sense" enable them to correctly diagnose the situation and provide a unique solution.

The Ill-Structured Decision Situation

In the interview, the researcher defined ill-structured decision situations as ones where there are no procedures in place, there isn't a policy in the handbook, and the principal has not had this particular situation before. The decision situation is also

viewed as unique, nonprogrammed, and nonroutine. The respondent was asked to provide examples of situations which he believed to be ill-structured.

The respondent suggested a number of situations where principals he knew had to make a decision under conditions which were ill-structured. The first example had occurred in the month of February during a particularly severe snowstorm. Rather than a system-wide decision, the principals had to decide if their school was to be open or closed. The respondent revealed that "when we had a discussion about this office relative to what happened in the schools, one of the things that came very clear to me is that they endorsed and were very appreciative of the fact that this office allowed them some latitude and had the trust in their ability to handle the problem, and that came through very strongly." From this statement, it appears that there are principals who want to make decisions but in the past may not have been given the responsibility.

The respondent also identified a number of situations which were people-related. The situations included "the student discipline area" and "all the situations that occur on a day-to-day basis, with parents, with kids." The respondent also mentioned situations which had the potential of developing into ill-structured decision situations. He explained that "the exposure in schools is enormous. In many instances nothing happens, but this is the potential, and when something does happen, then you're dealing with an ill-structured situation, and decisions have to be made that don't fall into the norm or then usual routine." Field trips and safety matters were provided as examples of situations which had the potential to become ill-structured.

The Area Superintendent's Perspective

Area Superintendent G spent the majority of the interview disclosing insights into the relationship between area superintendents and principals, the selection of principals, and the need to improve the decision-making capabilities of the principals.

The Relationship Between the Area Superintendent and Principals

The respondent suggested that the area superintendents may determine the principal's manner of decision making. He stated that "central offices and superintendencies, in their own style, can create how the principals operate. If the area superintendent brings a style of wanting the principal to check with them on everything, then that will condition the principals to operate in a particular way." This interaction serves to tacitly undermine the confidence in the principal's abilities to act independently and stifle the more independent principal. However, this style of interaction may benefit the novice principal, those who lack self-confidence to make a decision, and those who are less able to make good decisions. The end result may be to promote dependence and prevent growth.

The respondent believed that "the relationship of the superintendents to the principals has a great deal to do with determining how they [the principals] go about things, and if you're always going to be in touch with them . . . then they're going to look for somebody else making the decision and telling them what to do." A change in superintendents to one who requires the principals to "operate" their schools, "make the decisions," and "feel accountable for them" may result in difficulty for the principals who "have been conditioned to seek advice" while the principals who "operate quite independently . . . thrive on it." In making decisions, the principals need to be cognizant of the area superintendent's perspective. The respondent revealed that the area superintendents at times give "mixed messages" in that "they would like to see the principals being responsive, making decisions, settling problems, dealing with issues" while, contrarily, they also want to "see them doing things that are always safe and don't create problems." The superintendents also need to present their expectations to the principals.

In describing the most appropriate manner of interaction with the principals, the respondent explained that "it's very important for the area superintendent, the supervisor, the line officer working with those principals, that he or she knows their particular style, their strengths, their weaknesses, what kind of approach or help they require, and to use the same approach with all of them would be inappropriate for the line officer." Consequently, the area superintendent needs to provide individualized assessment and support for each principal. The assessment may have to begin prior to the selection of the principal.

The Selection of Principals

According to the respondent, "the current practice of people initiating interest in a principalship may have to be reviewed, and possibly districts have to take a greater proactive role in identifying potential candidates." The suitability of some of those aspiring to the principalship may be questionable. Then the respondent advised that "too often we wait for people to express their interest in a principalship, and the wrong ones are expressing an interest." Occasionally, a number of people who possess the necessary natural talents to be potentially good principals do not seek the position. The respondent believed that "you have to go looking for the people, identifying them, nurturing them, and then bringing them forth." Although certain people may be unofficially being groomed for the principalship by a mentor, Area Superintendent G advocated the change in school district procedures relative to the selection of principals. He articulated that:

> . . . the main role of the district office is to look at the first stage, and that is: how do you select principals? How do you identify the potential ones? If you do the appropriate selection, you may save yourself significant time relative to professional development because these people are off and running, and they're self-starters, and you just have to direct and guide and assist, as opposed to the other way, you have to be kicking ass and prodding and pushing for something to happen, the comfortable pew.

With the principal holding the significant leadership role in the school, "the identification of potential principals is critical."

Improving the Decision-Making Capabilities of Principals

In order to improve the decision-making capabilities, the principals need to be allowed to exercise their decision-making authority without interference or the overturning of their decisions. The respondent stated that "you will never get principals growing, you will never get principals becoming good decision makers, unless you allow them to wrestle with the reality of it, of the problem." The principals need to feel that they are being supported even when they make a poor or questionable decision. "If they screw up and you are supportive of them, but then take them aside and work with them and reconstruct where they may have made a better decision, they will find that acceptable, but they don't feel marooned or stranded; they feel supported and then learn from the experience." Such occasions form part of the principal's development process.

Appointment to the principalship is but the beginning of the development process, a process fostered by the school district. The respondent emphasized that "it's important for the district and the superintendents to make sure that they expend a great deal of time in developing their principals in a professional way, because they all have different levels of experience, different potentials, and that has to be one of the prime thrusts, I think, in a large district to make sure that there's an opportunity for growth, for development, by the principals, because the mainstay of a district, the strength of the district, is within the schools, not within the central bureaucracy, and if that is true, then the development of the principal, the key leader, the key team player in the school, is absolutely critical." Consequently, in this respondent's view, the central office administration needs to become involved in the development of the principals and specifically their decision-making capabilities.

Summary

Area Superintendent G believed that he could identify principals who were good decision makers in ill-structured decision situations. These principals were confident, creative, risk-takers, and entrepreneurial. They functioned as leaders, guided by well-established personal principles. They used their knowledge, experiences, and intuition to diagnose and resolve ill-structured situations. The respondent maintained that situations involving student discipline, parents, field trips, and safety matters had the potential of becoming ill-structured.

Besides these insights, the respondent expressed his perceptions regarding the relationship between the area superintendent and the principal, the selection of principals, and the improvement of the decision-making capabilities of principals. His first perception was that the decision-making processes used by a principal may have resulted from the expectations of the area superintendent. Secondly, he believed that the self-nomination process of principal selection did not adequately produce the best candidates. Consequently, the school district should develop a process to identify potential principals and then nurture and develop their talents. Thirdly, it was his conviction that the decision-making capabilities of the principals needed to be nurtured and developed so that they could execute their duties without intervention or rescinding their decisions. These were the perceptions of an area superintendent who was completing his first year in an acting position after being a high school principal for many years.

Case Study Area Superintendent H

At the time of the interview, Area Superintendent H had held his position with the school district for only two years. He came to the position with experience as

Director of Curriculum in a small urban district and as Superintendent of a rural district. The interview took place in the board room of the district office and lasted approximately forty-five minutes. The researcher's questions were answered in a succinct manner with little elaboration or digression.

The respondent provided a rather disconcerting response toward the end of the interview when he stated that "I'm not sure I understand what you mean by ill-structured . . . don't know precisely what you're trying to do . . . what are you trying to find out, if people are more effective in one situation or another?" Although the researcher explained the intent of the research and the distinction between ill-structured and well-structured decision situations at the outset of the interview, a lack of understanding may well have persisted throughout the interview and affected the type and quality of the responses.

Principals Who Are Good Decision Makers

The respondent revealed that he could "identify some decision makers who are more effective than others." The method which the respondent used to differentiate the effective principals from those who were less effective was related to their style or the manner of decision making.

Characteristics of Principals Who Are Good Decision Makers

The respondent alluded to a number of characteristics which were associated with principals who were good decision makers. These principals acted quickly, possessed good communication skills, had confidence to make the decision, had experience in similar decision situations, were objective in diagnosing a situation, and exhibited strong leadership qualities.

The respondent proposed that "leadership is not only being able to make good or quick decisions; leadership is being able to direct the team, you may say, or the organization, to work towards certain goals or the task at hand, which is to teach." In using the concept of the team, the respondent recognized the importance of collaboration and cooperation where the skills and expertise of each member augmented those of the other team members. As team leaders, principals, through their decisions, attempt to maximize the effort of each team member in the view of Area Superintendent H. The respondent elaborated that "leadership is being able to recognize your strengths and weaknesses in relation to the strengths and weaknesses of every other person on the staff or in the organization, and bring them to mesh, to work towards certain goals." Principals are required to be able to make accurate assessments or judgements of their staff's characteristics in order to make decisions which would be acceptable and would foster the team concept or spirit. Consequently, principals who are good decision makers probably have the characteristic of being good judges of human nature, including the strengths and weaknesses of an individual.

To further assist the respondent to articulate the characteristics of principals who were good decision makers, the researcher asked the respondent to describe the kind of person he would look for in selecting an administrator. The assumption with this tactic was that there would be consistency between the characteristics one would look for in a prospective principal and the characteristics of principals who were good decision makers. The respondent stated that:

> We're looking for people who have vision, that they sort of see a broad picture of what education is all about, or could be about; people who have commitment to that vision and the broad goals and objectives of the district; people who can work with other people, say in the role of principal. By working with other people, I mean [those] who can relate to other people, they can establish good rapport with other people and organize people to work towards certain common objectives. People who are well-organized themselves; people who have a sense of decision making or have ways of making decisions. They have a process that

> they've developed perhaps with experience and over the years. And then good basic knowledge of the programs or schools that they're going to administer; a good sense of what learning is, what good learning is, and how it can be promoted; knowledge about how children learn and all that; and some managerial skills, also. There are lots of things to do in and around the school that are managerial in nature. Let's say, once the budget is decided upon, there's the manner of implementing it and carrying it out, sort of thing. So those are some of the things I look at.

The characteristics that the respondent would look for in prospective principals are that they are people who have a vision regarding education, are committed to their vision and the goals of the school district, establish good rapport with people, are well organized, have a well-developed decision-making process, are knowledgeable about programs, the school, and learning, and have managerial skills. Such characteristics may describe the ideal principal. Since decision making is the process which permeates all aspects of administrative activity, the ideal principal would also be a good decision maker. Consequently, the characteristics of an ideal principal would be consistent with the characteristics of a good decision maker.

The Decision-Making Process Used By Principals

According to the respondent, the good decision makers, or the more effective decision makers, "act more quickly to gather the facts and gather the information required to make a decision and go ahead and make it." Although the respondent believed that good decision makers are quick decision makers, he conceded that it may be useful "to delay a decision to allow for a cooling period . . . that, to me, could be part of effective decision making."

Although at times they may make their decision unilaterally, the good decision makers, in the opinion of the respondent, consult or include the staff in the decision-making process. The respondent stated that "I would guess that the most effective ones, apparently, are the ones who involve staff in the process." The process not only

involves specific decisions, instances, or areas of concern but also the methods used to achieve the school's goals and objectives. The respondent advised that:

> I think the most effective ones are the ones that sit down with their staff and identify, again, some areas of concern or some areas of deficiencies, or maybe relate it to some goal that the school set, and then set some very specific objectives as to how to get there, and then you can allocate the money to do that or to meet the objectives.

The principals who are less skilled at decision making are reluctant to make difficult or unpleasant decisions. The respondent revealed that there are principals who "gather the information but like to sit on it and put off the decision . . . particularly if it's a somewhat unpleasant one." The respondent mentioned that there were also principals who were less skilled at decision making who were not reluctant to make unilateral decisions. He stated that "there are others who perhaps should consult; it would be helpful if they consulted, but hesitate to do so because it would look as if they're not able to do it or something." These principals may lack the self-confidence to look for assistance or share information.

The Ill-Structured Decision Situation

At the start of the interview, the researcher provided an affirmative reply when the respondent asked: "Do I understand you when you say ill-structured means that when a situation or a problem comes up, that there are no clearly-defined policies or regulations to deal with it?" However, throughout the interview, the respondent appeared unsure of the meaning of "ill-structured decision situations" and what the researcher was looking for. The examples he provided may reflect this uncertainty.

Area Superintendent H provided a number of examples of ill-structured decision situations. The first example was declaring staff redundant and communicating the reasons for the decision to them in a manner that they would accept. The second example related to the internal allocation of budgeted financial resources. The

respondent specified that "principals are left in an ill-structured decision-making situation because they have a fair amount of latitude into how they will use that budget." The third example was the allocation of funds for professional development. The fourth example dealt with the principal's relationship with the "community, parents of the school," and especially "the Parent Advisory Committees." In reference to the Parent Advisory Committee as a source of ill-structured decision situations, the respondent stated that "there are some decisions that have to be made there in terms of the principal deciding what advice he's going to take, to begin with, and how much." Finally, toward the end of the interview, the respondent noted that crisis situations with irate parents were ill-structured decision situations. "You deal with the crisis, and there isn't a set of rules as specific rules to deal with that," the respondent stated.

The examples provided by the respondent varied according to the degree to which they were ill-structured. The budget and financial decisions may be the least ill-structured, while decisions made under conditions of crisis may be the most ill-structured.

The Area Superintendent's Perspective

The respondent shared his perspective of the relationship between himself as area superintendent and the principals. The principals had the authority to perform certain duties and responsibilities, and were accountable for their actions. The respondent stated that he believed "very much in defining clear roles and responsibilities and giving the authority for a person to carry out that role and do it, but they're accountable. If things go wrong, they will have to answer for it, yes and have to answer for it." With the emphasis on the phrase "answer for it," the support given to the principals by Area Superintendent H, when their actions were in error or less than

appropriate, may be suspect and may affect the frequency and level of communication between the principals and himself.

In regard to clearing decisions with the area superintendent, the respondent stated that "I don't want them to clear decisions with me on a regular or daily or even weekly basis as long as they are operating within the realm of the policies and guidelines of the district; that's what they're for." The respondent wanted the principals to discuss with him their plans to innovate or depart from district policy. According to the respondent, "that's not the same thing as asking for me to make the decision or clear their decision."

The respondent divulged that the performance of the principals relative to the area superintendent may be a function of the expectations of the area superintendent. He stated that "I think whether they discuss it [a new direction] with me or not, for example, depends a lot on the relationship I might set up with them. I think that, if they see that I'm open and I'm going to be nonjudgemental and I'm not going to run them into the ground for coming up with a stupid idea, they're going to come to me more." The importance of support is revealed in that statement. Even when an action or contemplated action is inappropriate, in error, or detrimental, discussion, collaboration, and support is necessary to enable the principal to grow and benefit from the wisdom and experience of the area superintendent.

Summary

Although Area Superintendent H was only with the district two years, he believed he could identify principals who were good decision makers. He equated the terms "good decision makers" and "effective principals." These principals acted quickly, had good communication skills, confidence, experience, and were objective, with strong leadership skills. They fostered a team approach which used collaboration

and cooperation. They also functioned under strong personal principles, had good interpersonal skills, good managerial skills, a well-developed decision-making process, and were knowledgeable and well organized. In describing the decision-making processes which these principals used, the respondent said that they were quick to prepare to make a decision and to make it. He also believed that to delay a decision was a strategy used to allow time for the emotion of the situation to subside. These principals made their decisions, when possible, in consultation with their staff members. The respondent went on to describe the decision-making processes used by principals who were less skilled in decision making. Some of these principals were reluctant to make the more difficult decisions. Others made decisions, but should have had the self-confidence to ask for assistance.

Besides giving examples of the decision-making processes used by principals, the respondent was asked to give examples of ill-structured decision situations. From some of his remarks, it was possible that the respondent did not share the researcher's understanding of this terminology. The examples of ill-structured decision situations which he provided included declaring staff redundant, allocation of school budgeted resources, allocation of professional development funds, the level of advice to accept from the parent advisory committee, and, finally, crisis situations with irate parents.

The respondent discussed his expectations for principals working in his district. He believed that principals had the responsibility to make decisions and that they were accountable for those decisions. He wanted the principals to discuss their plans to innovate or depart from district policy. He also believed that the frequency of communication with the principal might be dependent upon the relationship which he might develop with the principal. Support for the principal was essential for the principal to develop and for a good relationship to be maintained.

Case Study — The Superintendent

The interview with the superintendent was the last interview with the senior central office administrators who participated in the present study. The interview took place in his office and took approximately twenty minutes. The respondent provided information and insights in a knowledgeable and candid manner regarding the principals who were good decision makers, their characteristics, and their decision-making processes. He also discussed the relationship between the area superintendents and the principals.

Principals Who Are Good Decision Makers

The superintendent believed that he could identify principals within the district who were good decision makers in situations which were ill-structured. In fact he stated that "there are certain principals who immediately come to mind" and then wondered if the researcher was looking for names. The respondent also identified a number of characteristics of principals who were good decision makers.

Characteristics of Principals Who Are Good Decision Makers

The superintendent believed that the principals who were good decision makers did in fact "make a decision, maybe not always the appropriate decision, but they will in fact make a decision." These principals had "a certain degree of self-confidence" and a "sense of creativity on their part, that they could look at situations and apply new and creative solutions, rather than always say, "What does the book say on it?" The respondent specified that they had "a sense of self-confidence, of self-worth, . . . and an ability to look at new, alternative, creative solutions in new situations." The good decision makers were also "very tuned to people—very people oriented."

The respondent characterized the difference between principals who were good decision makers in situations which were ill-structured and those who were not good decision makers as being "the difference between a school manager as opposed to a school leader." The manager was characterized as one who "deals far more with routine things, does things more by the book, does not take the bull by the horns and make new decisions in unclear situations." This principal would be less comfortable in situations which were ill-structured. This individual would "avoid those [ill-structured] situations," or "phone for assistance," or "leave it for a few days, maybe it will cure itself." According to the respondent, "principals who are good at making decisions in ill-structured situations see themselves as being assigned to a leadership position, and now they must lead."

Besides these characteristics, the superintendent suggested a number of questions which could be used to determine the attributes of the principals who were or could become good decision makers in ill-structured situations.

The questions were:

1. What do they think of themselves?
2. What is their value system?
3. How do they perceive others?
4. How do they value others?
5. Do they respect others?
6. Do others have dignity?
7. How do they see their role as school administrator?

8. Do they see the role of principal as a decision maker or as someone who's there as an intermediary between the central office and the teachers?

The questions pertain to the self-concept of the individuals and the relationship they would develop with other individuals. The latter two questions deal with a sense of vision regarding education and the principal's role as educational leader.

The Decision-Making Process Used By Principals

The superintendent discussed a number of strategies which were used by principals who were good decision makers in ill-structured situations, especially ones which were of a political nature. The respondent believed that one strategy was to "try to define the problem" by looking beyond the presented problematic situation since "the presenting problem often is not the real problem" and there may be "something else that's causing this situation." The respondent also specified that principals required an awareness that those involved in the problematic situation may have a "hidden agenda" or an "unknown agenda" which needed to be identified. For example, the respondent was "convinced that some people don't really know what they're so angry about when they come to the school. They've identified an issue that they're focusing on, but to solve that issue doesn't solve the problem, because another one will replace it. You haven't got to the core of the anger." Consequently, the principals who are good decision makers tend to explore the "nuances and finesses" of "political situations" and the motives of the individuals in these situations. These principals "can read beyond what the person is saying on the surface" and have the realization that the "other person can be perceiving a situation totally different." These principals then take steps to clarify the problem for each of the people involved.

According to the superintendent, the principals who are good decision makers are able to become involved in difficult situations without taking the view that they are

being personally attacked. Their reaction is not defensive but is a quest for understanding. The respondent indicated that they had the "tolerance and the acceptance and self-confidence" to listen and attempt to understand a person who is abusive to them by defusing the situation and enabling discussion of the "real problem."

The superintendent cautioned that the style of decision making may not have a direct relationship to the quality of the decision-making process. He presumed that "people had some very different styles in decision making, yet produce very good results." However, the principals who were good decision makers did tend to "contact a colleague or two and bounce the situation off them, see what they would do in that situation." They were able to consult and receive information to assist in solving the problem.

The Ill-Structured Decision Situation

When asked for examples of situations which the principals would deem to be ill-structured, the superintendent stated that "the classic ones are political situations: pressure coming from parents, from teachers, from the community at large," and he went on to ask, "How do you handle that pressure, and how can you deflect it, or turn something which could be very easily negative to something positive?" These situations are characterized by groups or individuals attempting to realize their particular objectives. The objectives may be precisely articulated or less obviously imbedded within a relatively unrelated presentation or argument. To understand the situation requires an understanding of the participants and their objectives. The decision situation is ill-structured since the objectives may not be completely understood and the various alternative courses of action may be difficult to determine.

The Superintendent's Perspective

The superintendent concluded the interview by providing insight into his perspective of the relationship between role expectations held for the principals and their actual behavior. Although it was not specifically articulated, one can reasonably assume that "the nature of the role that they're [the principals] expected to carry out" is determined by their area superintendent, who is the line officer to whom the principals report. In the respondent's opinion, these "higher level" expectations have a profound effect on the behavior of the principals. The respondent thought that "some people who could be potentially very good decision makers, if they're in a role where they're expected not to make decisions, they will do it [not make the decisions]." He believed that these principals have learned to function in a manner which is consistent with their perceived expected role, and therefore they do not make decisions. "On the other hand," the respondent said, "if they're put in a situation where they have to make decisions and are expected to, they will make decisions, and make good ones." This statement revealed that the role expectations for the principals may vary according to the area superintendent to whom they reported. Principals who are naturally predisposed to autonomy in decision making may experience some difficulty if their area superintendent expects them not to make a decision. Conversely, principals who are reluctant to make a decision would have difficulty with the expectation that they are to make all, or at least, a significant number of decisions. When asked about situations with a fellow who is not comfortable with making decisions and is put into the role where he has to make them, the respondent stated that "I think it'll be tragic, but in some situations he will float to the top and do well, but I think, as a general rule, that it could be a negative experience."

Under these conditions, one may assume that if area superintendents were asked to identify principals who were good decision makers in ill-structured decision

situations, they may identify those principals who functioned in a manner which was consistent with their expectations. Since expectations differ, the criterion for selection may also differ, and the selected principals may actually not be good decision makers in ill-structured situations. For instance, if the principals are expected not to make decisions or at least not to make decisions on their own, then there is the potential that principals selected as good decision makers by superiors may actually not be making independent decisions and therefore should not be included in a study of good decision makers.

The superintendent also raised the possibility that a principal's success in decision making may be related to the school environment. The respondent believed that "you have to look at the environment in which they operate." A good decision maker may not be a good decision maker regardless of the environment." A principal may function better in one environment as opposed to another. The principal does, however, have the ability to mold or recreate that environment. The principals who are good decision makers may create environments through their selection of personnel which enables them to be successful.

According to the respondent, the historical and experiential environment of the principals may contribute to the development of their decision-making abilities. The respondent revealed that "there are some generalizable skills, but I also think that there are some skills specific to certain types of structures, organizations, and maybe even issues, based on a person's background of experience."

Summary

Although the interview with the superintendent was short, information was provided in a very direct and candid manner. The respondent believed that he could easily identify principals who were good decision makers in ill-structured situations.

They approached their principalship as leaders prepared to lead rather than as managers prepared to manage the status quo. With ill-structured decision situations, they made decisions rather than avoiding making decisions in the hope that the situation would cure itself. Under these conditions, they also looked to others for assistance or to actually make the decision for them. Principals who performed well in ill-structured decision situations tended to be "people oriented," self-confident, and creative, the superintendent stated. The respondent also listed eight questions which he believed could be used to determine an individual principal's self-concept, relationships with others, vision, core principles or values, and perception of the role of educational leader.

In his experience, the respondent found that, in ill-structured situations, the principals who were good decision makers tried to determine the actual problem rather that limiting themselves to the problematic situation being presented. They searched for the motives and perceptions of those involved in the situation. They also endeavored to become cognizant of the "nuances and finesses" of situations which included political elements. These principals entered a hostile situation objectively to develop an understanding, rather than reacting as if they had been personally attacked. The respondent concluded by explaining that, although a variety of decision-making styles may produce "good results," the principals who were good decision makers tended to consult with their peers to collaboratively discuss, assess, and possibly resolve the situation. The situations which the respondent thought were ill-structured had political components, with pressure being exerted by parents, teachers, or community.

Besides discussing the decision-making processes and describing ill-structured decision situations, the respondent gave his insights into the relationship between role expectations held for the principals and their behavior. Each area superintendent had his own expectations for the principals who were responsible to him. One set of

expectations may have given the principals a great deal of autonomy in making decisions, while another set of expectations may have required that the majority of the decisions be cleared through the area superintendent. Consequently, the principal's behavior may have been a function of the area superintendent's expectations. The respondent also believed that school environment was possibly a factor in determining whether a principal was a good decision maker. It was possible that certain environments enhanced better decisions for a particular principal than another environment. Furthermore, the respondent suggested that a specific background of experience may have predisposed a principal to be a better decision maker in certain situations.

Chapter 6

FINDINGS OF THE STUDY

The present study sought to examine and interpret the decision-making processes used by experienced elementary and junior high school principals in resolving ill-structured decision situations. The main purpose of this chapter is to present a review of the research findings of the study. The chapter begins with an overview of the study which reviews the study's objectives, the theoretical orientation, research design and methodology. Following the overview, the research findings are presented from the reflective and introspective perspective of the interviewed respondents in each of the two groups of case studies: the experienced principals and the senior central office administrators. The discussion of the findings is developed around the themes used in the analysis of the interview data. The themes included the personality characteristics of the experienced principals, examples of decision situations which they considered to be ill-structured, the decision-making processes and strategies which the experienced principals used in resolving ill-structured decision situations, and, finally, the relationship between the experienced principal and the area superintendent.

Overview of the Study

Objectives

The primary objective of the study was to identify, describe, and interpret the decision-making processes (administrative and cognitive) used by experienced elementary and junior high school principals in resolving ill-structured decision situations. The study also sought to understand the context within which these

decision-making processes were used by determining the characteristics of those decision situations which the respondents considered to be ill-structured. This study also endeavored to investigate the personality and personal characteristics of the experienced school principals and their relationship with the area superintendents as factors potentially affecting the decision-making processes of the experienced principals.

Theoretical Orientation

The study was conducted within the interpretive theoretical orientation described by Burrell and Morgan (1979). This orientation makes the assumption that there are multiple realities. Each individual interprets and understands their own experiences, creating and structuring the social world in which they function. The research with directed toward determining and understanding how experienced elementary and junior high school principals structured their reality regarding the decision-making processes which they used in resolving ill-structured decision situations. Since these experienced school principals are responsible to senior central office administrators, the perceptions of the superintendent and area superintendents relating to the four themes of the study were also obtained.

Research Design and Methodology

A qualitative research design was selected for the study since this design was a most appropriate method to achieve the study's objectives. Conducted within a natural setting, qualitative research is descriptive and concerned with process rather than merely products. The essence of qualitative research is the search for meaning using a process of inductive data analysis.

In conducting qualitative research, the case study research strategy is most frequently used. This study used two groups of multiple case studies as primary data sources. In the first group, there were five case studies of experienced elementary and junior high school principals. These principals were among those nominated by members of the superintendent's office and identified to the researcher. In the second group, there were four case studies of the senior central office administrators: the superintendent and three area superintendents. These administrators were employed in the same school district as the interviewed principals. They were unaware of the identities of the principals who were part of the study.

The senior administrators were included in the study to determine if they could identify principals who, in their opinion, were expert decision makers in ill-structured decision situations. They were asked to give their perceptions of the personality characteristics of these principals, the decision-making processes that the principals may use in ill-structured decision situations, the decision situations which these principals may view as ill-structured, and issues regarding their relationship with principals and the principals' decision making.

In each case study, the semi-structured interview was the primary method of data collection. The interviews were tape-recorded and subsequently professionally transcribed.

Findings: Principal Case Studies

The five case studies of experienced principals explored four major topics. The topics included: the identification of the principals" personal characteristics; descriptions of decision situations which could be characterized as ill-structured; the

processes they used in making decisions; and their relationships with their area superintendents.

Personal Characteristics

This study sought to determine the self-identified personal characteristics of the interviewed experienced principals. The personal characteristics, revealed by the respondents, may be described as personality traits, beliefs, abilities, motives, attitudes, and values. The type and frequency of the self-reported personal characteristics are presented in Table 1. The five experienced principals cumulatively revealed twenty-nine personal characteristics. The respondents varied in the extent to which they provided these characteristics. For example, the principal with the greatest experience provided the fewest personal characteristics; namely, eight.

All five principals expressed their views in a rational manner, describing an approach to their responsibilities which was relaxed and reflective, free of anger and overreaction to particular situations. Four of the respondents identified that they were calm, confident, fair, firm (when required), and objective. Four respondents also revealed that they had learned and grown personally while principals, and that they had a vision or set of principles which guided them in their principalship. Three of the five principals reported that they were reflective, and that stress had led to adverse health conditions. Two respondents reported that they delegated, were flexible, honest, realistic, and that they reviewed professional literature. Only a single reference was made by the respondents to being aggressive, approachable, caring, consistent, a good leader, patient, open-minded, a risk take, trusted, with good interpersonal skills and a positive attitude. One respondent also stated he was a workaholic, while another stated he was the type of person who negotiates.

Table 1 **Type and Frequency of Self Reported Personal Characteristics**

Self-Reported Personal Characteristics	Principal A	B	C	D	E	Frequency
Aggressive (capable of acting very aggressively)	✔				✔	1
Approachable			✔			1
Calm	✔	✔	✔		✔	4
Caring					✔	1
Confident	✔		✔	✔	✔	4
Consistent				✔		1
Consults	✔	✔	✔		✔	4
Delegates	✔	✔				2
Fair	✔	✔	✔	✔		4
Firm (when required		✔	✔	✔	✔	4
Flexible	✔		✔			2
Good interpersonal skills	✔					1
Good leader	✔					1
Honest			✔	✔		2
Learned and grew personally while principle	✔		✔	✔	✔	4
Negotiates	✔		✔	✔	✔	4
Patient					✔	1
Positive attitude	✔					1
Open minded				✔		1
Objective	✔	✔		✔	✔	4
Reflective	✔		✔	✔		3
Realistic		✔	✔			2
Professional literature used	✔	✔				2
Risk taker	✔					1
Stress leading to health problems experienced			✔	✔	✔	3
Trusted				✔		1
Understanding (human behavior)	✔				✔	2
Vision for the conduct of the school	✔		✔	✔	✔	4
Workaholic			✔			1
Frequency of Response per principal	16	8	13	13	17	64

The respondents appeared to be sincere and honest about the information that they provided. Individual principals could have reported other characteristics in their self-description, but may have been prevented from doing so because they did not think of those characteristics at the time, or because they were being humble.

Personal characteristics may be a very relative factor in resolving ill-structured decision situations since many if not all such decision situations involve interactions with other human beings. A skill in such interactions would be an asset, not only in information acquisition but also in decision implementation.

Ill-Structured Decision Situations

In addition to discussing personal characteristics, the respondents identified decision situations which were ill-structured. Their opinions are presented in Table 2, Types and Frequencies of Principal Reported Ill-Structured Decision Situations.

Table 2 **Types and Frequencies of Principal Related Ill-Structured Decision Situations**

Principal Reported Ill-Structured Decision Situations	Principal					Frequency
	A	B	C	D	E	
Assigned an especially difficult student		✓				1
Child neglect and abuse	✓	✓	✓			3
Inappropriate staff placement		✓				1
Inauguration of new procedures or process			✓		✓	2
Irate parents (usually with student discipline situation		✓	✓	✓	✓	4
Retention of students			✓			1
Special placement of students		✓		✓	✓	3
Teacher evaluation					✓	1
Unusual emergent situations		✓				1
Frequency of response by principal	1	6	4	2	4	17

Note: Principal D reported that situations including retention of students, child abuse, and teacher redundancy were well structured.

The experienced principals identified a total of nine decision situations as ill-structured. These situations involved the assignment of an especially difficult student, child neglect and abuse, inappropriate staff placement, inauguration of new procedures or programs, irate parents (usually with student discipline situations), retention of students, special placement of students, teacher evaluation, and unusual emergent situations.

The number of examples of decision situations which the interviewed experienced principals perceived to be ill-structured varied among the respondents. One respondent gave six examples, two respondents gave four examples, one respondent gave two examples, and one respondent gave only one example of ill-structured decision situation. The respondent who provided the single example believed that he really did not have the kind of problems that were overwhelming or caused him concern about the method he would use to resolve the situation. However, he referred to situations of child neglect and abuse as ill-structured during the course of the interview.

The frequency each ill-structured decision situation example was selected by the respondents ranged from one to four occasions. Four of the five respondents viewed situations involving irate parents as being ill-structured. Three respondents talked about situations regarding child abuse and neglect, and the special placement of students as ill-structured, while two respondents believed that the inauguration of new procedures or programs was an ill-structured decision situation. Only three single respondents identified being assigned an especially difficult student, the retention of students, teacher evaluation, and unusual emergent situations as ill-structured decision situations. One respondent, Principal D, advised that the retention of students and situations of child abuse were rather well-structured since well-established procedures were in place to resolve such situations.

Despite describing and obtaining examples of ill-structured decision situations, there seemed to be a difference between the researcher's understanding and the respondents' conceptualization of the meaning of this terminology. The respondents may have viewed the term "ill-structured" as a negative reflection on their administrative behavior.

Process of Making a Decision

The processes used by the interviewed experienced principals in resolving ill-structured decision situations are presented in Table 3.

Table 3 **Types and Frequencies of Principal Reported Processes used in Decision Making**

Principal Reported Processes Used in Decision Making	Principal					Frequency
	A	B	C	D	E	
Allowing personal values, moral and religious convictions to influence decision making	✓			✓	✓	3
Choosing options to maintain the dignity of those involved	✓	✓		✓		3
Consulting—External (other principals and/or area superintendent)		✓	✓	✓	✓	4
Consulting—Internal	✓	✓	✓	✓	✓	5
Delaying decisions to investigate, gather information, and think	✓	✓	✓	✓		4
Diffusing the Situations	✓		✓	✓	✓	4
Engaging in proactive, preliminary planning and development of procedures to minimize occurrence of ill-structured decision situations	✓	✓	✓	✓		4
Mediating/negotiating/facilitating	✓	✓				2
Reflecting on situations		✓	✓	✓	✓	4
Seeking Information beyond the presented situation to explore what the real problem might be	✓		✓			2
Thinking of the effects of various decisions on the individuals involved		✓	✓	✓		3
Using experience	✓	✓	✓	✓	✓	5
	9	9	8	11	6	43

The five respondents disclosed a total of twelve decision-making processes. These processes included diffusing the situation, external consultation, internal consultation, looking beyond the presented situation to identify the real problem, maintaining the dignity of those involved, mediating (negotiating and facilitating), reflecting on decision situations, delaying decisions to investigate, gathering information, and thinking of the effects the various decision alternatives may have on the individuals involved, using past experience, relying on personal values, moral and religious convictions to influence decision making, and being proactive with preliminary planning and development of procedures to minimize the occurrence of ill-structured decision situations.

Even though each principal talked about his own administrative style in resolving ill-structured decision situations, there appeared to be a number of processes or strategies which each respondent had in common. All five respondents relied extensively on their past experiences. The respondents frequently reviewed these experiences to develop specific courses of action in newly-presented situations. Past experiences provided the respondents with opportunities to understand human behavior, develop skills in interpersonal relationships, and to increase their self-confidence.

All five respondents also consulted internally, with their assistant principals, counsellors, and staff members, in their decision making. The respondents benefited from the experiences of these staff members. Investigative information-gathering was one of the prime objectives of the internal consultation with staff and students, and usually related to the incident which precipitated the ill-structured decision situation. Data were also obtained about previous incidents which involved the child, and previous interactions with the parents of the child. Occasionally, the school secretaries were also consulted as a "sounding board" regarding particular decision alternatives.

Four of the experienced principals advocated five decision-making processes, which included diffusing the situation, external consultation, reflection on the decision situation, delaying the decision, and being proactive to anticipate and avoid the occurrence of ill-structured decision situations. When confronted with highly emotional irate parents, the four respondents attempted to diffuse the emerging situation and calm the parents. Specifically, they acted in an empathetic and sympathetic manner to either delay discussions with the irate parents to give them time to calm down, or they encouraged the irate parents to present their concerns, expecting that their anger would dissipate once they had an opportunity to present their concerns. One of these respondents wanted to accommodate the parents by arranging to meet with them in the evening. The overriding objective was to prevent the situation from escalating in severity.

External consultation was used by four respondents. These respondents consulted externally with their peers and central office specialists in relation to specific questions. One respondent was part of a peer network of five elementary principals from within the school district who had schools in the same geographic area. They met on a regular basis to review emerging issues and discuss individual procedures to resolve particular situations. Occasionally, they telephoned each other to share opinions and perspectives and to propose a course of action on a particular situation. These principals were sufficiently confident in themselves and in the other members of the group to be very candid in their communication. They seemed to function as a support group which could stimulate the growth of each member.

Reflection upon decision situations was another process used by four of the respondents. Their time to reflect was usually at the end of the school day or during the drive home. The four respondents not only reflected upon the circumstances and individuals associated with the decision situation, but they also reflected upon their

past experiences with similar situations or the persons involved in the situation. Through their reflections, these respondents were better able to understand the present situation and to relate this understanding to the processes and strategies which they employed in the past. The respondents' reflection upon distant and immediate past experiences enabled them to monitor and adjust their behaviors and to promote their growth in the principalship.

Besides reflecting upon past and present situations, four respondents also attempted to avoid pressure to make quick or snap decisions. Believing it was better to have a good decision rather than a quick one, the four respondents delayed or took time to make their decisions. This time enabled them to obtain information and understand what had occurred, think about the perspectives and reactions of those involved, reflect on past experiences, and identify alternative actions along with the possible consequences of those actions. The time also provided an opportunity for consultation to determine how others might view the situation. One respondent stressed the need to look beyond the situation as it was presented in order to identify possible underlying factors which were the real problem. Another respondent seemed to delay making a decision in the hope that the situation would resolve itself or disappear, with no decision having to be made.

Finally, four respondents discussed the importance of being proactive through preliminary planning in anticipation of particular events to decrease the emergence of potentially difficult situations and to limit the severity of these situations. To be proactive, standard operating procedures were developed to gather and maintain information, especially in regard to student discipline and the selection and retention of staff.

Three of the five experienced principals included within their decision-making processes the need to maintain the dignity of the individuals involved in the decision-making situations, the necessity to think of the effects of various decision alternatives on the individuals involved, and the influence of their personal values, morals, and religious convictions on their decision making. The three respondents revealed that, by treating individuals with dignity and respect, they would minimize the possibility that these individuals would become embarrassed or lose face.

By thinking of the effects of various decision alternatives on the involved individuals, the respondents were developing and using a criterion for assessing the decision alternatives. The best alternative may not be selected if it affected in the individuals in an unacceptable manner.

Three of the interviewed experienced principals stated that their personal values, morals, and religious convictions influenced their decision making. In fact, at times, their decisions were consistent with these convictions, to make a decision which was in the best interests of the child, while inconsistent with established policy. Each of these respondents had a well-developed and well-understood system of values and morals based on their religious beliefs and family experiences.

Only two of the five respondents looked beyond the presented circumstances to think what may be the real problem in the particular situation. For instance, they believed that, at times, the anger directed toward the school may be caused by issues or conditions which in no way related to the school.

Two of the five respondents also stated that in ill-structured decision situations they attempted to mediate, negotiate, or facilitate an acceptable decision with the involved individuals. The inclusion of these individuals in the decision process increased the likelihood of acceptance of the decision.

The interviews with the experienced school principals revealed interesting information about the decision-making processes which they used in ill-structured decision situations. There was a high level of agreement among the respondents regarding the processes to be used in reaching a decision in an ill-structured decision situation.

Relationship with the Area Superintendent

A theme which evolved during the course of the interviews was the relationship between the principal and the area superintendent. The principals described the relationship with their area superintendents in a variety of ways, as presented in Table 4.

Respondent A was very concerned about an apparent lack of communication with the area superintendent regarding the possible ending of the bilingual program and closing of the school. Although he was very confident in his performance as a school administrator, he began to think that the lack of communication may have been due to possible deficiencies in himself or his vice principal. He was also concerned about the area superintendent's perception of his abilities. Consequently, he tried to communicate sufficiently so that the area superintendent would not feel ignored, while avoiding communication which might give the impression that he could not run his school. The respondent believed that the area superintendent would question the abilities of some principals because of the frequency and nature of the situations which these principals presented to their area superintendents. The perceived relationship with the area superintendent affected the respondent's self-confidence, the frequency and content of the communication, and his administrative behavior.

Table 4 **Types and Frequencies of Principal-Reported Comments Regarding The Relationship Between the Principal and Area Superintendent (AS).**

Principal Reported Comments	Principal					
	A	B	C	D	E	Frequency
Concerned about the area superintendent's unwillingness to discuss the possible discontinuation of his school program	✓					1
Believed that area superintendents must wonder about the abilities of some principals based on the frequency and type of situation presented by the principal	✓					1
Concern about the area superintendent's reaction and perceptions	✓					1
Contacted area superintendent. to determine the district;s plans and to reassign a teacher who was not working out at the school						
Keep the area superintendent informed so that he is not surprised			✓	✓		2
Consulted area superintendent to solve a problematic situation			✓	✓	✓	3
Influenced by the level of support which the principal could expect from the area superintendent				✓		1
Believed that the area superintendent acted as a check on the principal preventing an abuse of power				✓		1
Believed that the relationship between the area superintendent and principal affected how principals made decisions		✓	✓	✓	✓	4
Believed he could **not** make a decision without the confidence that you would be supported by the area superintendent	✓		✓			2
	4	1	4	5	2	16

The respondent with the longest experience as principal, Principal B, revealed a very limited interaction with the area superintendent. The only time that he communicated with the area superintendent's office was to determine the future plans of the district, and in the case of reassigning a teacher.

Principal C consulted his area superintendent in making difficult decisions and to provide information regarding decisions which had long-term implications and which may be viewed as a change of direction. From past experience, the respondent had learned to consult his area superintendent prior to making difficult decisions. This

respondent believed that it was important to keep the area superintendent informed so as to prevent him from being surprised by evolving situations.

Principal D presented a similar position when he stated that he consulted the area superintendent to solve problematic situations, and that he attempted to keep the area superintendent informed so that he was not surprised. Principal D revealed that the level of support which he could expect from his area superintendent influenced the decision he would make. He also believed that the area superintendents acted as a check on the principals' activities, preventing them from abusing the power of their position. Principal D was the only respondent who provided four comments regarding the relationship between the principal and the area superintendent with respect to the principal's decision making.

Principal E provided three comments on the relationship between the principal and the area superintendent. As with principals C and D, he consulted the area superintendent to solve problematic situations. Principal E believed that the relationship between the area superintendent and the principal affected the principal's decision making. Principal E also commented that the principal needed to be confident of the support of the area superintendent because without that confidence the principal would resist or be hesitant in making decisions.

The type and frequency of the principals' communication with the area superintendent may in part be affected with a concern to create or maintain a particular perception for the area superintendent regarding the abilities of the principal. Furthermore, the decision-making behaviors of principals may have to be determined by the style and demands of their area superintendent.

Findings: Superintendent Case Studies

Identification of Principals Who Were Good Decision Makers

The three area superintendents and the superintendent all disclosed that they could identify principals who were good decision makers in ill-structured decision situations. The area superintendents also gave a brief indications of the criterion which they used to make this assessment. One respondent, the only area superintendent with a doctorate, said that he used the research literature on problem-solving to assess the ability of principals to make good decisions. Another respondent made his selection through the identification of the principals' relative strengths, style, and how the principals operated in decision-making roles. The third respondent equated good decision makers with being effective principals. The selection criteria used to identify good decision makers were general in nature, with probable idiosyncratic differences among respondents. To reveal and develop a greater understanding of the implicit components of the criteria used by each respondent in identifying principals who were good decision makers in ill-structured situations, the respondents were asked to describe, in general, the characteristics of such principals. The respondents' replies yielded greater insight into their individual concepts of what traits they perceived in good decision makers.

Characteristics of Principals Who Were Good Decision Makers

Three of the four respondents stated that the principals who were good decision makers were able, in fact, to make decisions as shown in Table 5.

Table 5 **Characteristics of Principals Who are Good Decisions Makers as Identified by the Area Superintendents (F, G, H) and the Superintendent (S)**

Principal Reported Comments	F	G	H	S	Frequency
Able to make decisions	✓		✓	✓	3
Risk takers		✓			1
High self confidence	✓	✓	✓	✓	4
Strong leadership qualities		✓	✓	✓	3
People oriented	✓		✓	✓	3
Governed by core values or principles	✓	✓	✓		3
Well organized			✓		1
Good managerial skills			✓		1
Knowledgeable/experienced			✓		1
Frequency	4	4	8	4	20

The fourth respondent may also have agreed with this assessment since he described the principals who were good decision makers as risk-takers, indicating that some other principals had difficulty making decisions. Principals who avoided making decisions in the hope that the situation would resolve itself or had to continually phone central office to have the decision made for them were regarded by the superintendent as being poor decision makers.

Each respondent believed that principals who were good decision makers had high levels of self-confidence. These principals also were confident of the support they had from their superiors. Without such confidence, principals would probably be reluctant to increase their exposure to reprimand and possibly having their decisions overturned. Consequently, they may avoid making the decision or attempt to have the decision made for them.

Strong leadership qualities were identified by three of the four respondents as a characteristic of principals who were good decision makers. These principals were able

to develop support for new creative initiatives. They were also able to adapt procedures to accommodate differing and evolving conditions. They did not view themselves as mere managers, managing the status quo, nor as intermediaries between the central office and the school community but as those who had and accepted the responsibility to lead. These principals assumed a leadership role rather than taking a reactive posture.

In addition to strong leadership qualities, three respondents stated that principals who were good decision makers were people-oriented. They had good judgement in diagnosing the individual strengths and weaknesses of staff members. These principals were able to work collaboratively to foster cooperation which would maximize an individual's strengths and overcome his or her weaknesses. The principals were very skilled in interpersonal relations and developed good rapport with others. They respected those with whom they interacted, treating them with dignity and helping them to maintain self-esteem as well as emotional and psychological well-being in difficult situations. According to one respondent, they attempted to resolve situations in a manner which would ensure that no one would be harmed or lose face. In short, they tried to reach win-win solutions.

Three of the respondents explicitly stated that principals who were good decision makers in ill-structured situations were governed by strong personal principles or core values or cornerstone objectives. They had a vision and worked to achieve that vision. The fourth respondent also alluded to the sense of vision by referring to their leadership qualities and suggesting that one should determine principals' value systems and how they perceived themselves.

Besides these characteristics, one respondent elaborated that these principals were well-organized, with good managerial skills. They were knowledgeable and had a wealth of experience, enabling them to develop their own decision-making processes.

The Principal's Decision-Making Processes

Although the superintendent indicated that various decision-making styles produced good results, a number of important strategies and components of the processes used by principals who were believed to be good decision makers were revealed by the respondents and are summarized in Table 6.

Table 6 **Decision-making Processes Used by Principals Who Were Identified as Good Decision Makers as Reported by the Area Superintendent and the Superintendents**

	F	G	H	I	Frequency
Correctly understands and interprets conditions of all structured decision situations (the presented problem may not be the real problem)	✓	✓		✓	3
Diffuses the situation	✓			✓	2
Assures that affected partied do not lose face	✓				1
Reaches a compromise decision through collaboration and negotiation	✓				1
Able to make the "tough" or difficult decision when a compromise is not achieved	✓				1
Consults with staff and/or other principals in resolving ill-structured decision situations	✓		✓	✓	3
Takes time to make the decision	✓				1
Uses an intuitive sense		✓			1
Relies on a depth of experience		✓			1
Acts quickly to gather facts and information			✓		1
Explores the nuances of the situation				✓	1
Leads staff members to accept and implement unpopular decisions	✓	✓			
Frequency	8	6	3	4	18

Three of the respondents emphasized the importance of the principal correctly understanding and interpreting the ill-structured decision situation. For understanding, the principal needed to first correctly diagnose the situation since, at times, what was being presented was not always the real issue or concern. One respondent stated that these principals acted quickly to gather the facts, a function necessary to comprehend the situation. Another respondent believed that the principal needed to explore the "nuances and finesses of political situations" to determine motives and search for possible hidden or unknown agendas. A third respondent suggested that principals who were good decision makers in ill-structured decision situations used an intuitive sense in assessing the decision situation. These principals also relied on their depth of experience to comprehend emerging decision situations, to generate alternative solutions, and possibly to develop their intuitive sense. The respondent described this decision-making style as the art of administration.

Another component of the decision-making process which three respondents identified as being used by principals who they believed to be good decision makers was consultation. In two cases, the described consultation was with other principals, while the third case centered on consultation with staff members. Reference was made to the informal peer communication networks developed by a number of principals to review emergent and potentially ill-structured decision situations. There was virtually no reference to consultation between principals who were good decision makers and the respondents. Only one respondent said that the principal called his office to keep him informed about particular situations.

Two of the four respondents believed that these principals tried to diffuse volatile ill-structured decision situations to prevent their escalation. Two respondents, in describing the decision-making processes of principals who were good decision

makers, stated that they negotiated in a collaborative manner to lead the participants in a difficult situation to a compromised mutually-acceptable solution.

A number of other strategies used by principals who were good decision makers were proposed by single respondents. These principals did not act impulsively but took time to carefully think about and understand the situation prior to making a decision. At times, they delayed a decision to provide a cooling-off period for those involved in the situation. If necessary, they could make the "tough" decision without asking their superiors to make the decision for them. They conducted their interactions in a manner that assured that individuals involved in the situation would not lose face.

As well as reviewing the components and strategies used in decision making, two respondents, F and G, revealed that principals who were good decision makers had the ability to lead their staff members in the acceptance and implementation of unpopular decisions. They provided the rationale for the decision in the context of its benefits for the school and the school district.

In this segment of the interview, two of the respondents discussed the processes used by principals who were poor decision makers. Both emphasized that these poor decision makers lacked confidence. The respondents discussed two types of behaviors which they perceived as resulting from lack of confidence. The first type of behavior they saw as occurring when principals wanted the decision to be made for them, since they lacked confidence in themselves and felt that they had little support from their area superintendent. The second type of behavior would occur when principals lacked the confidence to share information or look for assistance in difficult situations. In these latter instances, they were reluctant to make decisions and tended to hold information without acting, in the expectation that the problem would go away and the situation would resolve itself. At times they were impulsive in their decision making

and provided no rationale for the decision which they made. Although a number of interesting components and strategies of the decision-making process used by principals who were good decision makers in ill-structured situations were identified by the respondents, there is no reason to expect that the list is complete.

Ill-Structured Decision Situations

Besides describing the processes used in making decisions, the respondents provided examples of ill-structured decision situations (see Table 7).

Table 7 **Decision Situations Which Principal May Find to be Ill-structured as Identified by the Area Superintendents (F, G, H, I)) and the Superintendent (I).**

	F	G	H	I	Frequency
Interactions with irate, upset, angry, and non-objective parents regarding student discipline	✓	✓	✓	✓	4
Implementation of unfavorable board decisions	✓				1
Relationship with community especially the Parent Advisory Council		✓		✓	2
Declaring staff redundant			✓		1
Conflicting interests and politically sensitive issues	✓			✓	2
Allocation of budget resources			✓		1
Allocation of professional development funds			✓		1
Student safety associated with school sponsored field trips		✓			1
School closures during inclement weather		✓			1
Total	**3**	**4**	**4**	**3**	**14**

All four respondents believed that these situations resulted from interactions with irate, upset, and nonobjective parents, usually about matters relating to their children. Relationships with the Parent Advisory Council and the community in general were specifically viewed as potential sources of ill-structured decision situations by two respondents. Situations relating to teachers, especially declaring staff redundant and conflict of interests, were also given as examples by the

respondents. One respondent maintained that allocation of budget resources and professional development funds were ill-structured decision situations.

All the examples of decision situations which were ill-structured involved other individuals under conditions of conflicting interests or objectives. The superintendent categorized these situations as political.

The Respondent's Perspectives

During the interviews, the respondents candidly shared their views and understandings regarding their relationships with their principals, the decision-making style of the principals, and potential for improvement. The respondents' comments are presented in Table 8. Two of the three area superintendents and the superintendent advocated that the decision-making style of the principals may be determined by the actions, expectations, and decision-making style of their area superintendent. For example, certain principals were conditioned not to make decisions without clearing them with their area superintendent.

The remaining area superintendent, F, believed that the relationship between the area superintendents and the principals could be improved by spending more time with the principals. He also advocated that the area superintendents needed to give their principals confidence that they were supported by their area superintendent. He believed that this could be achieved by not overturning the principal's decision.

Table 8 **The Perspectives of the Area Superintendents (F, G, H) and the Superintendent (I) Regarding Principals and Decision-Making.**

	F	G	H	I	Frequency
Decision making style, expectations, and actions of the area superintendent may determine the behavior of the principals		✓	✓	✓	3
Area superintendents should know the capabilities of each principal and provide assistance as required		✓			1
Area superintendents need to allow principals to make decisions without interference or insistence that they clear decisions with the area superintendent.		✓	✓		2
Area superintendents need to show that they are supportive of the principal	✓	✓			2
Area superintendent should be more involved in developing the principal's decision-making capabilities		✓			1
Education is becoming more political—parent involvement designed to achieve the goals of the individual parent	✓				1
Relationship between the area superintendent and principal needs to be improved by spending more time with the principals	✓				1
The decision-making successes of the principal may be related to the demographic characteristics of individuals served by the school				✓	1
The principals' background of experience contributes to decision-making success.				✓	1
Area superintendents and central office personnel should accept a greater proactive role in identifying potential principals rather than relying on self-nominations		✓			1
	3	6	2	3	14

Area Superintendent G also commented that area superintendents needed to show that they were supportive of their principals. He further believed that the area superintendents needed to take the time to develop the decision-making capabilities of the principals. Area superintendent G maintained that the area superintendents should know the capabilities of each principal and provide the appropriate assistance to enhance the decision-making capabilities of the principals. He believed an area superintendent needed to support his principals, allowing them to make decisions without interference while providing individual assistance as required. Area

Superintendent H articulated a similar view by stating that the principals should be given the authority to make decisions which would not need to be cleared with the area superintendent, provided they were within district policy and guidelines.

Additional comments included the conviction by one area superintendent, F, that education was becoming more political, with parents expending greater energy to achieve their individual objectives. Another area superintendent, G, believed that a more proactive role could be taken to identify and nurture potential principals rather than relying on the present method of selecting principals from a self-nominated group of individuals. Finally, the superintendent advanced the idea that the decision-making capability of principals could be affected by the particular school environment and also the background experiences of the principal. These comments give an opportunity to ponder other factors which may affect the present study and offer avenues for subsequent research.

A Comparison of the Findings from the Case Studies of the Principals and the Area Superintendents/Superintendent

The Characteristics of the Principals

Each of the interviewed principals was requested to describe their personal characteristics, as reported in Table 1. On the other hand, the three area superintendents and the superintendent, senior central office administrators, were requested to identify the personal characteristics of principals who, in their opinion, were good decision makers in ill-structured decision situations, as reported in Table 5. A significant similarity was noted between the findings from each group of case studies.

Four of the five principals described themselves as confident, while all four senior central office administrators listed high self-confidence as a characteristic of principals who were good decision makers in ill-structured decision situations. They also described the principals as being confident in the support that they had from their superiors.

While only one principal specifically described himself as a good leader, the other four principals showed that they possessed good leadership qualities through the description of their activities. Three of the four senior central office administrators believed that principals who were good decision makers possessed strong leadership qualities.

All five principals discussed the decisions which they made without specifically stating that they made decisions. The five principals appeared capable and willing to make decisions in ill-structured decision situations. Three of the four senior central office administrators also indicated that principals who were good decision makers were able to make decisions, rather than looking to a superior to make the decision for them or avoiding to make the decision altogether.

Although the interviewed principals did not specifically discuss their personal values, morals, and religious convictions when describing their personal characteristics, three of the five principals revealed that their decision making was influenced by their personal values, morals, and religious convictions (see Table 3). Three of the four superintendents stated that principals who they believed were good decision makers were governed by core values or principles.

The principals discussed a number of their characteristics which related to their interpersonal skills or to a particular orientation toward people. These characteristics, with the number of principals who presented them, were: approachable

(1), calm (4), caring (1), fair (4), good interpersonal skills (1), negotiates (1), patient (1), positive attitude (1), open-minded (1), trusted (1), and understanding of human behavior (2). Three of the four senior central office administrators stated that principals who were good decision makers were people-oriented. They believed that these principals had good judgement to understand an individual's strengths, weaknesses, and behaviors. They were team-builders, skilled in interpersonal, relations and concerned about maintaining the dignity and self-esteem of those with whom they associated.

The other characteristics presented by the principals, with the frequency of response, were: aggressive--capable of acting very aggressively (1), consistent (1), consultative (4), delegates (2), flexible (2), honest (2), firm--when required (4), objective (4), reflective (3), realistic (2), reviewed professional literature (2), and a workaholic nature (1). These characteristics relate to the three characteristics which one of the senior central office administrators used to describe principals who were good decision makers. According to this area superintendent, these principals were well-organized, possessed good managerial skills, and were knowledgeable/experienced. These characteristics appeared to be prevalent in all the interviewed principals.

One principal described himself as a risk-taker, and one interviewed area superintendent also believed that principals who were good decision makers in ill-structured decision situations were risk-takers. However, the other principals tended to act in a very moderate way, avoiding getting into situations which could be deemed to be risky.

There was considerable consistency between the characteristics of principals who were good decision makers, as identified by the superintendents, and the descriptions which the principals provided regarding their own characteristics. Based on a review of personal characteristics, the five experienced principals who were

interviewed may well be selected by their superiors as good decision makers. However, one of the principals, Principal B, showed, on occasion, a lack of willingness to make decisions, tending instead to put off decisions with the expectation that the situation would resolve itself or just go away. This principal had the greatest amount of administrative experience of any of the interviewed principals. His avoidance behavior may be the result of past negative experiences after making decisions. His extensive experience as principal may have provided a greater number of opportunities for negative reactions to have occurred. Procrastination in making a decision was described by Janis and Mann (1977) as the first of three forms of defensive avoidance.

The experienced interviewed principals revealed two very interesting conditions which related to their personal characteristics which were not identified by the senior central office administrators. Four of the principals stated that they learned and grew personally while fulfilling their responsibilities as principal. The functions which they performed, the decision situations which they encountered, and the individuals with whom they interacted contributed to their personal development and growth. Furthermore, during their tenure as principal three of the respondents admitted that they had experienced stress to the extent that health problems had occurred. Medical intervention and a conscious use of strategies to reduce stress resulted in a change in their thinking patterns and behavior.

Ill-Structured Decision Situations

Since this study focused on the decision-making processes used by experienced principals in ill-structured decision situations, the respondents were asked to describe examples of ill-structured decision situations which are presented to the principals. Without a universally accepted criterion for the classification of decision situations, these descriptions were important in order to understand the perceptions of each

respondent and how they may classify decision situations. A decision situation may be treated as ill-structured by one principal while the same decision situation may be treated as a well-structured decision situation by another principal.

The interviewed experienced principals and the area superintendents and the superintendent were each asked to give examples of ill-structured decision situations which may be presented to the principal. The researcher defined the meaning of the terminology "ill-structured decision situation" for each respondent.

The interviewed principals provided nine examples (see Table 2), and the area superintendents and the superintendent also provided nine examples (see Table 7). Each of the examples involved the interaction between the principal and another individual, student, staff member, parent, or community. Generally, there was limited similarity between the examples provided by each group of respondents. However, one example enjoyed almost unanimous agreement.

Four of the five interviewed principals and all four of the senior central office administrators believed that decisions involving irate, angry, and nonobjective parents, usually regarding student discipline, were ill-structured decision situations. These decision situations were unique because of the uncertainty of the parents' next reaction or the specific motivation for their present reactions. This type of decision situation was potentially very volatile and could easily escalate.

An area superintendent disclosed that the principal's relationship with the Parent Advisory Council and the community, in general, were potential sources of ill-structured decision situations. No one from the principals' group suggested this example.

Once again, the superintendents' group suggested examples which were not specifically mentioned by the principals. These examples related to teachers in cases of

declaring a teacher as redundant (frequency =1) and situations of a political nature involving staff members with conflicting interests (frequency = 2). Single principals described two staff-related examples of ill-structured decision situations. These situations related to inappropriate staff placement and teacher evaluation. The principals expressed a concern regarding the potential conflict between expectations of performance and a teacher's actual performance. The principals developed staff selection strategies to minimize the occurrence of such difficulties.

One area superintendent suggested that the allocation of budget resources and professional development funds were ill-structured decision situations. Such examples were not advocated by any other senior central office administrator nor by any of the interviewed principals.

The area superintendents provided three other examples of ill-structured decision situations. These included the implementation of unfavorable school board decisions, student safety associated with school-sponsored field trips, and individual school closure during inclement weather. These examples were not advocated by any of the interviewed experienced principals.

The majority of the examples of ill-structured decision situations which the principals described involved students. Three principals suggested that cases of suspected child neglect and abuse were ill-structured decision situations. Although there is legislation which mandates reporting suspected cases of physical or sexual abuse, the respondents' concerns included conditions of neglect and emotional abuse which may not be defined in the legislation. One principal found suspected child abuse situations especially difficult since, on two occasions, the information which he provided in confidence to welfare officials was shared with the child's parents. Principal D, however, was of the opinion that such decision situations were well-

structured because of the well-established procedures which were in place within the social welfare departments.

The special placement of students, being assigned an exceptionally difficult student, the retention of students at the lower grade levels, and unusual emergent conflict situations were four examples of ill-structured decision situations presented by the interviewed experienced principals. None of the area superintendents nor the superintendent gave these examples.

From the perspective of two principals, changing conditions, expectations, and interest group pressures may necessitate the inauguration of new procedures or programs. A significant departure from the status quo was seen by the principals as potential ill-structured decision situations since there was a venture into the unknown and the ultimate effect of the change could not be forecasted with total confidence. This example of an ill-structured decision situation was not advanced by any of the interviewed senior central office administrators.

The superintendents alluded to the increasing political nature of education. More and more, individuals and groups are seeking to attain their diverse and often conflicting agendas. Making a decision or finding a solution which accommodates conflicting positions and expectations was viewed as an ill-structured decision situation by one area superintendent.

This study showed that, with the exception of decision situations which involved irate parents, there was little relationship between the examples of ill-structured decision situations advanced by the experienced principals and those suggested by the senior central office administrators. In fact, there was limited agreement within each of the two groups in the study, the principals and the superintendents. The feature which nearly all examples of ill-structured decision situations had in common was the decision maker's involvement with other

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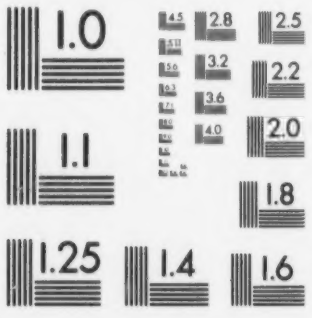

PRECISION[SM] RESOLUTION TARGETS

individuals, students, parents, staff members, or community members who usually advocated divergent views, beliefs, and aspirations.

The Decision-Making Process

The principals reported twelve processes (see Table 3) which they used in decision making under ill-structured decision situations. The area superintendents and the superintendent identified eleven processes (previously shown in Table 6) which they believed principals who were good decision makers would use in making decisions in ill-structured decision situations. The five interviewed principals used many of the same processes in their decision making. Each of the twelve processes was selected by a mean of 3.6 of the five principals. The area superintendents and the superintendent were less consistent than the principals with the decision-making processes which they identified. Each of the eleven processes was reported by a mean of 1.6 of the four-member superintendents' group. Each principal identified a mean of 8.6 decision-making processes which they used, while each of the four members of the superintendents' group identified a mean of 4.5 decision-making processes used by principals who they believed were good decision makers.

All five principals used internal consultation with staff, students, and administrators, and reviewed past experiences when addressing newly-presented ill-structured decision situations. Three of the four superintendents stated that principals who were good decision makers consulted internally with staff members and/or externally with other principals. Four of the principals indicated that they consulted externally with other principals or with their area superintendent.

Once again, all five of the interviewed principals stressed that they used their past experiences as a foundation to approach newly-presented ill-structured decision

situations. Only one area superintendent stated that principals who were good decision makers relied on their depth of experience.

Four of the principals indicated that they would diffuse the ill-structured decision situation. This process was identified by two of the senior central office administrators. Diffusing the situation minimized the possibility of the situation escalating, and provided an opportunity for the participants to reach a less emotional and more rational state.

Four of the principals stated that they would delay making a decision in order to investigate, to gather information, and to think. One member of the superintendents' group stated that principals who were good decision makers took time to make a decision, while another member of this group stated that these principals acted quickly to gather facts and information.

Four principals stated that they reflected upon the decision situation, and four principals believed that they were proactive, using preliminary planning and the development of procedures to minimize the occurrence of ill-structured decision situations. Although the superintendents did not specifically identify these two processes, they did state that the principals used an intuitive sense and explored the nuances of the situation. which may be part of the process of reflection.

The use of intuitive sense may also be part of looking beyond the presented situation to identify the real problem, rather than accepting the presented problem. Two of the interviewed principals advocated this process. Two area superintendents, and the superintendent also, emphasized that principals who are good decision makers in ill-structured decision situations correctly understand and interpret the conditions associated with the ill-structured decision situation since the presented problem may not necessarily be the real problem.

Three of the principals would maintain the dignity of the individuals involved in the decision situation, and three principals thought of the effects various decisions may have on the individuals involved in the situation in deliberating about their decision. These processes are consistent with the process presented by one area superintendent when he stated that the principal would assure that the affected parties would not be placed in the position where they would lose face.

Two of the principals stated that they would mediate and negotiate to facilitate a decision. This is consistent with the descriptions provided by two of the superintendents who believed that principals who were good decision makers reach a compromise decision through collaboration and negotiation. This process would be especially useful in situations which involved conflict between or among individuals with distinctly different objectives or positions.

Three of the principals revealed that their decision making was influenced by their personal values, morals, and religious convictions. This position was supported by the superintendents' group when they discussed the personal characteristics of principals who were good decision makers, as noted in Table 5. Finally, one area superintendent stated, that the principals who were good decision makers were able to make the "tough" or difficult decision if a compromise could not be achieved.

The decision-making processes used by the experienced interviewed principals were virtually identical to the decision-making processes which the area superintendents and the superintendent ascribed to principals who were good decision makers in ill-structured decision situations. Collectively, the senior central office administrators appeared to be very aware of the decision-making processes used by principals. The interviewed principals certainly exhibited the decision processes expected by their superiors from principals who were good decision makers.

The area superintendents and the superintendent believed that principals who were good decision makers were able to lead their staff members to work together to implement decisions which, at times, were unpopular. They also believe that such principals also had a vision or sense of purpose, functioning under a set of governing values and principles. Covey (1992) believed that "leadership itself can be broken down into two parts: one having to do with vision and direction, values and purposes, and the other with inspiring and motivating people to work together with a common vision and purpose" (P. 246). The central office respondents interviewed in the present study emphasized these two leadership qualities.

Besides referring to leadership and other qualities of principals who were good decision makers, the area superintendents and superintendent discussed the features of principals who were poor decision makers. They believed that principals who were poor decision makers lacked confidence, wanted decisions to be made for them, acted impulsively, did not share information or look for assistance, and avoided making decisions, with the expectation that the situation would resolve itself and no decision would be required.

The Respondents' Perspective

The five interviewed principals provided eleven comments (see Table 4) about the relationship between the principal and the area superintendent and its effect on their decision making. The area superintendents and the superintendent provided ten comments (see Table 8) about factors which may affect the principals' decision making, and actions which they could take to improve the principals' decision-making skills.

Four of the principals' comments referred to the reasons that a principal would have to communicate with their area superintendent. These comments and the frequency with which they were reported were: concern that the area superintendent

would not feel ignored (1), contact the area superintendent to determine the district's plans, and to reassign a teacher who was not working out at the school (1), keep the area superintendent informed so that he is not surprised (2), and consult the area superintendent to solve problematic situations (3).

One principal voiced three comments regarding his concern about the area superintendent's thoughts or perceptions. He was concerned about the area superintendent's unwillingness to discuss the possible discontinuation of his school program, concerned that the area superintendents must wonder about the abilities of some principals based on the frequency and type of situation presented by the principals, and concerned about the area superintendent's reaction and perceptions.

The four remaining comments provided by the interviewed experienced principals confirmed the direct effect that the area superintendents had on a principal's decision making. Four principals stated: the level of support which the principal could expect from the area superintendent influences the decisions he would make; the area superintendents acted as a check on the principals, preventing the principals from abusing their power; the relationship between the area superintendent and the principal affected how principals made decisions; and principals could not make a decision without the confidence that they would be supported by their area superintendent.

The area superintendents and the superintendent corroborated the principals' view that their relationship with their area superintendent affected their decision making. Three of the senior central office administrators stated that the decision-making style, expectations, and actions of the area superintendent may determine the behavior of the principals. Two members of the superintendents' group believed that the area superintendents need to allow principals to make decisions without

interference or requiring the principals to clear their decisions with the area superintendents. Two area superintendents also commented that the area superintendents need to show that they are supportive of the principals. One area superintendent believed that the relationship between the area superintendent and the principals needs to be improved by spending more time with the principals.

The area superintendents provided three suggestions relating to the decision-making capabilities of their principal. One area superintendent suggested that each area superintendent should know the capabilities of each principal in order to be able to provide assistance as required, and that the area superintendents should be more involved in developing the principals' decision-making capabilities. Another area superintendent believed that area superintendents and central office personnel should accept a greater proactive role in identifying potential principals, rather than relying on self-nomination.

Finally, three comments proposed that a variety of factors affected a principal's decision making. One area superintendent stated that education was becoming more political, with increased parent involvement designed to achieve the particular goals of that parent. The superintendent proposed that the decision-making successes of a principal may be related to the demographic characteristics of the individuals served by the school. A principal who was very successful in one setting may not experience the same success in a different school. The superintendent believed that a principal's background of experience contributed to decision-making success. This position is confirmed by all five of the interviewed experienced principals when they emphasized their use of past experiences in addressing newly-presented ill-structured decision situations (see Table 3).

In discussing their personal perspectives, the principals and senior central office administrators primarily discussed the real or perceived relationship between the area superintendent and the principals and its impact on the principals' decision making. The decision-making style developed by a principal may be a function of the decision-making style of his or her area superintendent.

Chapter 7

SPECULATIONS, RECOMMENDATIONS, AND CONCLUDING REMARKS

In analyzing and interpreting the data obtained from the interviewed experienced elementary and/or junior high school principals and the area superintendents and the superintendent, a number of speculations may be postulated.

Speculations

Speculation 1: Experienced principals use past experience to interpret and resolve ill-structured decision situations.

Sloan (1987, p. 22) advocated that "our views of reality are originally constructed on the foundations of interpersonal experience." Husserl (1948) believed that a person's judgements are determined by assumptions about the world developed through that individual's experiences. These experiences not only suggest clues to future action, but also provide a foundational framework which enables the individual to interpret and understand a newly-presented decision situation.

Sloan (1987, p. 50) stated that "the aim of cognitive activity is to grasp how and what things are." In the present study, all of the five experienced school principals emphasized that they used their past experiences in interpreting and resolving ill-structured decision situations. To arrive at an appropriate understanding, interpretation, and resolution of an ill-structured decision situation may require analytical and intuitive judgements based on an extensive knowledge base. Schon (1983) explained that:

> managers have become acutely aware that they are often confronted with unique situations to which they must respond under conditions of stress

> and limited time which leave no room for extended calculations or analysis. Here they tend to speak not of technique but of "intuition." (p. 239)

According to Scholz (1987, p. 63), "intuition has to be developed and relies on past personal experiences that has often been gained through a direct situational involvement." Through these experiences one develops and enhances one's knowledge base. This knowledge base is accessed in making judgements when ill-structured as well as structured decision situations are presented. Sloan (1987, p. 50) maintained that "In the general case of judgement, the goal is knowledge. In decision, it is knowledge of what to do that is sought." Prior to seeking new knowledge, individuals usually review the knowledge which they possess of similar situations and of successful and unsuccessful processes which they had used. In discussing decision makers who are faced with ill-structured or messy decision situations, Schon (1983, p. 43) stated that "they deliberately involve themselves in messy but crucially important problems and, when asked to describe their methods of inquiry, they speak of experience, trial and error, intuition, and muddling through. Sergiovanni (1987, p. xiv) suggested that "professionals rely heavily on informed intuition." Sergiovanni (1987, p. xiv) believed that "intuition is informed by theoretical knowledge on the one hand and by interacting with the context of practice [experience] on the other." Once again, experience and intuitive thought as well as the experiences which may be gained from trial and error as well as muddling through were emphasized by decision makers. Kahney (1986, p. 89) suggested that "experience of a number of related problems can result in the acquisition of a problem-solving schema, a general strategy for dealing with a particular type of problem." In elaborating on the relationship between experience and the resolution of emergent situations, Kahney (1986) explained:

> Today we know that learning can also be transferred between ill-defined, distantly related problems, but that transfer is not automatic. People need experience with a number of examples of a particular type of problem in order to be able to abstract the common elements, to develop

> a problem schema, before they can automatically bring their knowledge to bear on subsequent problems. (p. 98)

Reviewing their experiences when presented with an ill-structured decision situation, principals are searching for information or a problem-solving schema which may be applicable or adaptable to the present situation.

Speculation 2: The perceptions used by experienced principals in diagnosing newly-presented ill-structured decision situations are related to their depth of experience.

In this study, the two area superintendents and the superintendent believed that principals who were good decision makers were better able to correctly understand and interpret conditions of ill-structured decision situations. Their successful perception of newly-presented issues, conditions, and behaviors may result from their experientially-developed extensive knowledge bases and the perceptual skills developed through these experiences. Kolasa (1969) defined perception as a function of an individual's experiential knowledge base. Kolasa (1969) believed that:

> Perception is a basic cognitive process with many variable aspects to affect behavior. It may be defined as the organization of material which comes in from outside at one time or another. Perception may also be considered as the interpretation of data that is received from inputs. The system, or organism, recognizes the information, assembles it, and makes comparisons with material previously stored in the "central information processing storage." This involves a whole history of what has happened to the individual over his lifetime, since it is the organization of inputs through an inner process that is dynamic, that is, a constantly changing one. It is a process that shapes whatever comes in from the outside; in turn, what there is changed by what comes in. (p. 212)

An individual's knowledge base is developed from perceptual stimulations provided by that individual's experiences. Sergiovanni (1987, p. 164) postulated that "professional knowledge is created in use as professionals, faced with ill-defined, unique, and constantly changing problems, decide courses of action." As new experiences or situations are presented, the individual continually accesses his or her knowledge base

in order to understand or make sense of the new perceptions. The information obtained from the new perceptions may support, challenge, or extend the individual's knowledge base. In relating knowledge and perception, Trusted (1987, p. 10) stated that "any empirical knowledge must be supported by evidence provided by perception of how things seem to individuals."

The principals who are good decision makers and are able to correctly diagnose ill-structured decision situations probably possess extensive knowledge and perceptual skill. Chi, Glaser, and Rees (1982, p. 2) stated that "expertise is, by definition, the possession of a large body of knowledge and procedural skill." This is consistent with Schein's view that professional knowledge was made up of three components:

1. An *underlying discipline* or *basic science* component upon which the practice rests or from which it is developed.
2. An *applied science* or *"engineering"* component from which many of the day-to-day diagnostic procedures and problem-solutions are derived.
3. A *skills and attitudinal* component that concerns the actual performance of services to the client, using the underlying basic and applied knowledge. (p. 43)

These components of professional knowledge contribute to the principal's diagnostic process of interpreting emerging ill-structured decision situations.

Speculation 3: Experienced principals use their cognitive and experiential resources to define the problem which needs to be resolved within the ill-structured decision situation.

Sergiovanni (1987) believed that "in reality, the task of the principal is to make sense of messy situations [ill-structured decision situations] by increasing understanding (p. xiii) and discovering and communicating meaning." Schon (1983, p. 40) stated that "in real-world practice, problems do not present themselves to the practitioner as givens." Occasionally the presented problem may not necessarily be the

real problem. Isakesen and Treffinger (1985, p. Three-1) confirm this view when they stated that "real problem situations are rarely encountered in a clear, neatly-stated precise form; some time and energy must be spent to get them ready to solve." This sentiment was articulated by a number of the respondents in both the principals' and superintendents' group of this study. After correctly understanding and interpreting the emergent ill-structured decision situation, the principal, as decision maker, should focus on defining the decision problem, or problem setting. Schon (1983, p. 40) defines problem setting as "the process by which we define the decision to be made, the ends to be achieved, the means which may be chosen."

Similarly, Tversky and Kahnemann (1981) believed that the way the decision maker conceptualized or framed the problem may predetermine the action alternative which may be selected. Tversky and Kahnemenn (1981) define a frame as:

> the decision-maker's conception of the acts, outcomes, and contingencies associated with a particular choice. The frame that the decision-maker adopts is controlled partly by the formulation of the problem and partly by the norms, habits, and personal characteristics of the decision-maker. (p. 453)

Their concept of problem-framing not only included Schon's (1983) concept of problem setting, but also addressed the influence of the decision maker's norms, habits, and personal characteristics in the structuring, definition, or alternative selection within the ill-structured decision situation.

In the present study, the experienced principals emphasized the importance of correctly defining the problem. A principal may believe that he has resolved the problem correctly but, if it is the wrong problem, the decision situation tends to become more complicated and the principal's credibility is diminished.

Speculation 4: The principals' personal characteristics, character, and personality traits, influence their decision making.

Sloan (1987, p. 64) believed that "all deciding should thus be seen as mediated by the embeddedness of conscious processes in the structure of character." He generally defined character as "a structure of intentions which a subject seeks to accomplish in social life which bears the imprint of experience in relations with important others over the life course" (p. 64). An individual's character traits are developed through experience, and are exhibited through the individual's interactions with others. "Characteristic dispositions ("traits") are develop as a consequence of repeated patterns of social interaction or traumatic events," (Sloan, 1987, p. 120). In identifying and reporting their character traits, the principals indicated that these characteristics had developed and grown through their administrative experiences, interactions with family members, and other life experiences. Since ill-structured decision situations usually involved interactions with others (staff members, students, parents, superiors, and community members) character traits which contribute to the enhancement of interpersonal relations would promote understanding and resolution of ill-structured decision situations. The self-reported personal characteristics or character traits confirmed this speculation. Tversky and Kahneman (1981, p. 453) confirmed that the way an individual frames a problem or ill-structured decision situation is partly controlled "by norms, habits, and personal characteristics of the decision maker." The personal characteristics of school principals who were deemed to be good decision makers in ill-structured decision situations, as reported by the senior central office administrators, also included the interpersonal dimension.

The identified personal characteristics not only describe the character of the individual, but may be included within the more encompassing personality description. Krech and Crutchfield (1958) believed that personality includes:

> the individual's traits, abilities, beliefs, attitudes, values, motives, habitual modes of adjustment. It includes what we call *temperament*--the typical emotional reactions, mood states, and energetic attributes of the person--as well as what in older terminology was called character--the moral outlook and conduct of the person. And more than this, it includes the synthesis of all these--the particular manner in which traits, abilities, motives, and values are organized within the person. (p. 609)

In developing a background for a definition of personality, Kimble (1956) summarized aspects of personality when he stated:

1. Personality is almost always defined so as to include a variety of traits, capacities, or abilities.
2. There is usually the suggestion that these traits are organized or integrated in some way.
3. Personality is commonly regarded as unique to the individual.
4. Personality is often regarded as affecting the relationship of the individual to others. According to one such statement, personality is the "social stimulus value" of an individual.
5. Personality is usually considered as fairly permanent, and characteristic of the individual over an extended period of time. (p. 358)

Kimble (1956, p. 358) assembled these aspects of personality into a single definition, in stating that personality means "the unique organization of fairly permanent characteristics which sets the individual apart from other individuals and, at the same time, determines how others respond to him." Hilgard and Atkinson (1967, p. 462) indicated that personality is not static, but does change and evolve through the influence of past and future experience, so, looking at personality, we "must take into account . . . the residues from experiences that have shaped the person as we find him." In referring to Veroff's (1983) representation of personality as interactions among historical, cultural, developmental, organizational, and interpersonal contexts, Sloan (1987, p. 36) explained that "when personality is construed in this broad manner, we come very close to the sort of understanding we will require in an adequate psychology of decision making."

In this study, the area superintendents and the superintendent identified personality characteristics of principals whom they believed to be good decision makers in ill-structured decision situations. These characteristics—able to make decisions, risk takers, high self-confidence, governed by core values or principles, well-organized, and knowledgeable/experienced—related to aspects of their "inner personality" (Baller & Charles, 1968, p. 396), while strong leadership skills, people-oriented, and good managerial skills relates to their "outer personality" (Baller and Charles, 1968, p. 396). The personality of the principal is a significant factor in determining how the principal may understand a newly-presented ill-structured decision situation, interact with the individuals involved with the situation, and resolve the situation.

Speculation 5: Experienced principals reflect on their actions and behaviors in relation to decision situations which have been previously experienced as well as those which are currently emerging.

Killion and Todnam (1991, p. 15) viewed reflection as "the practice or act of analyzing our actions, decisions, or products by focusing on our process of achieving them." Three of the five experienced principals in this study specifically discussed their reflective practices while the other two principals alluded to that practice without using the terminology. The three principals usually had a time reserved for reflection. In their reflections, the principals reviewed and monitored their decisions, assessed the processes that they used to understand and resolve the decision situation, and thought of ways to adapt or improve their procedures and strategies for subsequent decision situations. The reflection, which was undertaken after thoughts and actions had been completed, was described by Schon (1983, p. 278) as "reflecting-on-action."

However, an individual's reflection is not restricted to the completion of a procedure or resolution of a decision situation. Reflection by the school principal, for instance, may also occur during the presentation of a new ill-structured decision situation as well as during the evolution and development of that decision situation. When presented with these decision situations, the interviewed experienced principals revealed that they look to or reflect upon what they have learned or know from their past experience. In describing this process, Schon (1983) stated:

> Usually reflection on knowing-in-action goes together with reflection on the stuff at hand. There is some puzzling, or troubling, or interesting phenomenon [an ill-structured decision situation] with which the individual has to deal. As he tries to make sense of it, he also reflects on the understandings which have been implicit in his action, understandings which he surfaces, criticizes, restructures, and embodies in further action.
>
> It is this entire process or reflection-in-action which is central to the "art" by which practitioners sometimes deal well with situations of uncertainty, instability, uniqueness, and value conflict [an ill-structured decision situation].(p. 50)

Reflection-in-action differs from reflection-on-action since it is a thinking process which occurs while other action is contemplated or considered. Schon (1983, p. 241) described reflection-in-action, from a manager's perspective, when he stated that "it consists of on-the-spot surfacing, criticizing, restructuring, and testing of intuitive understanding of experienced phenomena." These reflections are not restricted to easily accessed and referenced knowings but also to those understandings which may not be easily articulated: what Polanyi (1966) called tacit knowing, knowing more than we can tell.

Intuitive understandings may be tacit. Schon (1983, p. 276) believed that "when practitioners reflect-in-action, they describe their own intuitive understandings . . . the description of intuitive knowing feeds reflection, enabling the inquirer to criticize, test, and restructure his understandings."

The interviewed experienced principals revealed that they reflected-in-action through their experiential review, while attempting to understand and resolve newly presented ill-structured decision situations. According to Schon (1987, p. 322), a reflective practitioner "must be attentive to patterns of phenomena, skilled at describing what he observes, inclined to put forward bold and sometimes radically simplified models of experience, and ingenious in devising tests of them compatible with the constraints of an action setting." The relationship between experience and reflection in relation to meaning was provided by Giorgi (1986) when he stated that:

> meanings are discovered only reflectively, not straight-forwardly. Experiences are spontaneously directed toward the objects or states of affairs in the world and not directly to the meanings. In order to grasp or clarify the meaning of an experience, one has to reflect upon it.(p. 13)

Sergiovanni (1987, p. xvi) explained that "educational administration as a *reflective practice profession* uses knowledge from science and experience to inform the professional's intuition as professional knowledge is created in use in response to unique practice problems."

Speculation 6: Experienced school principals use metacognitive processes in their administrative careers.

Metacognition is more than cognition of one's cognition or thinking about one's thinking. According to Flavell (1976), a leader in the study of metacognition:

> Metacognition refers to one's knowledge concerning one's own cognitive process and products or anything related to them e.g. the learning-relevant properties of information or data. . . . Metacognition refers, among other things, to active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in the service of some concrete goal or objective. (p. 232)

Metacognition refers not only to one's reflection on one's thinking, but also the subsequent regulation or control of that thinking as it applies to newly emergent or

presented situations. Brown and Palincsar (1982, p. 1) stated that knowledge about cognition "involves conscious access to one's own cognitive operations and reflection about those of others; it is a form of declarative knowledge about the domain thinking." Access to one's thinking and the subsequent self-knowledge of that thinking is achieved through reflective processes. In describing the regulation of cognitive activity, Brown and Palinscar (1982, p.1) stated that it involved:

> planning activities prior to understanding a problem (e.g., predicting outcomes, scheduling strategies, and using forms of vicarious trial and error), monitoring activities during learning (monitoring, testing, revising, and rescheduling one's strategies for learning), and checking outcomes (evaluating the outcome of one strategic action in terms of criteria or efficiency and effectiveness). (p. 12)

The experienced principals interviewed in this study used metacognitive processes in their administrative careers. They stated that their decision-making processes and cognitive activity, in ill-structured decision situations, had changed and improved during their administrative experience through reflection, monitoring, consultation and adaptation of their decision making and thinking strategies. Leithwood and Stager (1986, p. 24), in their study of Differences in Problem-Solving Processes used by Moderately and Highly Effective Principals, found that "all principals reported that their problem-solving had changed with increased administrative experience." The importance of metacognitive processes in decision making was emphasized by Leithwood and Stager (1986, p. 7) when they stated that "effective solution creation depends on the metacognitive processes (problem-solving strategies) available to the principals to guide the uses they make of their knowledge, skill, and affect." The decision-making abilities and the thinking associated with decision making of present and future school principals may be enhanced by providing training designed to enhance their metacognitive skills. Nickerson, Perkins, and Smith (1985, p. 142) contend that "metacognitive skills, which involve the managing of one's own cognitive resources and the monitoring of one's own cognitive performance,

would also seem to be natural candidates for training objectives for efforts to enhance thinking."

Speculation 7: Experienced school principals use critical thinking to a greater extent than creative thinking in understanding and resolving ill-structured decision situations.

Ennis (1985, p. 54) defined critical thinking as "reasonable reflective thinking that is focused on deciding what to believe or do." The experienced principals used this type of thinking in attempting to understand a newly-presented ill-structured decision situation. Isaksen and Treffinger (1985, p. Two-2) explained that "critical thinking is analyzing and developing possibilities to: compare and contrast ideas; improve and refine promising alternatives; screen, select, and support ideas; make effective decisions and judgements; and provide a sound foundation for effective action." Critical thinking is used when information needs to be evaluated or sorted according to any of a variety of criteria such as importance or relevance. Anderson (1980, p. 2) stated that a profusion of ideas "requires us to think critically in order to get rid of the less valuable ideas." Ennis (1987) related a number of actions or dispositions associated with critical thinking. These dispositions, as quoted in Marzano et al (1988), are to:

- Seek a clear statement of the thesis or question.
- Seek reasons.
- Try to be well informed.
- Use and mention credible sources.
- Consider the total situation.
- Try to remain relevant to the main point.
- Keep in mind the original or basic concern.
- Look for alternatives.
- Be open-minded.

- Take a position (and change a position) when the evidence and reasons are sufficient to do so.
- Seek as much precision as the subject permits.
- Deal in an orderly manner with the parts of a complex whole.
- Use critical-thinking abilities (skills).
- Be sensitive to others' feelings, level of knowledge, and degree of sophistication.(p. 23)

These dispositions are consistent with the self-reported information provided by the experienced principals in discussing their personal characteristics and the decision-making processes which they used in ill-structured decision situations. These dispositions are also reflected within the descriptions of decision-making processes used by school principals whom the area superintendents and the superintendent considered to be good decision makers in ill-structured decision situations.

Ill-structured decision situations are characterized by uniqueness and the need for creative resolution alternatives. In presenting their definition of creativity, Isaksen and Treffinger (1985) stated:

Creativity is Making and Communicating meaningful new connections:

- to help us think of many possibilities;
- to help us think and experience in varied ways and using different points of view;
- to help us think of new and unusual possibilities;
- to guide us in generating and selecting alternatives. (p. Two-1)

Halpern (1984, p. 324) maintained that "creativity can be thought of as the ability to form a new combination of ideas to fulfill a need." Marzano et al (1988) presented five aspects of creative thinking, which included:

1. Creativity takes place in conjunction with intense desire and preparation.
2. Creativity involves working at the edge rather than the center of one's capacity.

3. Creativity requires an internal rather than external locus of evaluation.
4. Creativity involves reframing ideas.
5. Creativity can sometimes be facilitated by getting away from intensive engagement for a while to permit free-flowing thought. (p. 24-27)

In describing their decision-making, the interviewed principals stimulated their idea generation and creative-thinking abilities through consultation with their peers, staff members, and superiors. Their creative thinking occurred through their reflective activity during their reflection-on-action and their reflection-in-action. Van Gundy (1981, p. 4) believed that "creative problem-solving techniques will be most appropriate for problems of this type [ill-structured]." He listed seventy techniques applicable to four stages of problem solving,

1. redefining and analyzing problems,
2. generating ideas,
3. evaluating and selecting ideas, and
4. implementing ideas. (p. 11)

The interviewed experienced principals used very few creative problem-solving techniques identified and described in the research literature, but tended to rely on their critical-thinking skills.

In distinguishing between creative and critical thinking, Anderson (1980, p. 65) suggested that "creative thinking is concerned with conceiving of what may be possible," while "critical thinking is concerned with determining which possibilities are probable and which are improbable." Creative thinking is complementary to critical thinking. Isaksen and Treffinger (1985, p. Two-2) confirmed this position when they stated that "*creative* and *critical* thinking, imagination and judgement, can work together productively—that these are not mutually exclusive or "conflicting" processes." Nickerson, Perkins, and Smith (1985, p. 88) also supported this view when

they disclosed that "creativity requires critical thinking." The divergent component of creative thinking promotes idea generation, while the convergent component utilizes a more critical-thinking approach in information analysis. Isakesen and Treffinger (1985, p. 2) emphasized that "critical and creative thinking are mutually important aspects of effective problem solving."

A number of blocks or barriers to creative thinking have been postulated by researchers. They include: anxiety about our ideas, and conformity and habit-bound thinking (Parnes, 1981); historical, biological, physiological, sociological, and psychological (Shallcross, 1981); personal blocks, problem-solving blocks, and environmental-organizational blocks (Raudsepp, 1981); and perceptual, emotional, cultural, environmental, and interactual/expressive, (Van Gundy, 1982). Although a number of these barriers to creative thinking may have been present in the interviewed experienced principals, a more likely explanation for their deficiency in employing creative problem-solving techniques is their lack of awareness of these techniques.

Speculation 8: The thinking style and personality type of the school principal affects the decision-making processes and the associated thinking skills of that individual principal.

Marzano, Brandt, Hughes, Jones, Presseisen, Rankin, and Suhor (1988, p. 68) presented a sequence of core thinking skills "essential to the functioning of the other dimensions [of thinking]." They believed that these core thinking skills "may be used in the service of metacognition, the cognitive processes, or critical and creative thinking; they are means to particular tasks, such as critically analyzing an argument"(p. 68). The twenty-one thinking skills are grouped into eight categories, as presented in Figure 1.

Focusing Skills

1. Defining problems
2. Setting goals

Information Gathering Skills

3. Observing
4. Formulating questions

Remembering Skills

5. Encoding
6. Recalling

Organizing Skills

7. Comparing
8. Classifying
9. Ordering
10. Representing

Analyzing Skills

11. Identifying attributes and components
12. Identifying relationships and patterns
13. Identifying main ideas
14. Identifying errors

Generating Skills

15. Inferring
16. Predicting
17. Elaborating

Integrating Skills

18. Summarizing
19. Restructuring

Evaluating Skills

20. Establishing criteria
21. Verifying

Figure 1 Core thinking skills (Marzano et al, 1988, p.69)

The eight categories of core thinking skills are: focusing skills, information-gathering skills, remembering skills, organizing skills, analyzing skills, generating skills, integrating skills, and evaluating skills. Although these core thinking skills were originally presented within the context of curriculum and instruction, they are also useful in describing the thinking of experienced principals in resolving ill-structured decision situations.

According to Marzano et al (1988, p. 70), Focusing Skills are used "when an individual senses a problem, and issue or a lack of meaning." The core thinking skills used in focusing are defining the problem, "clarifying situations" (p. 70), and setting goals, "establishing direction and purpose" (p. 72). The interviewed experienced principals used these thinking skills when presented with an ill-structured decision situation. The area superintendents and the superintendent made specific reference to

these skills when describing the actions of principals whom they believed to be good decision makers in ill-structured decision situations.

The category Information Gathering Skills refers to the "skills used to bring into consciousness the substance or content to be used for cognitive processing," (Marzano et al, 1988, p. 73). The core thinking skills within this category included observing, "obtaining information through one or more senses" (p. 74), and formulating questions, "clarifying issues and meaning through inquiry," (p. 74). The interviewed experienced principals used these thinking skills very extensively when presented with emerging ill-structured decision situations.

Marzano et al's (1988, p. 77) third category of core thinking skills was Remembering Skills, which "are activities or strategies that people consciously engage in to store information in long-term memory and to retrieve it." The core thinking skills discussed within this category included: encoding, "the process of linking bits of information to each other for storage in long-term memory" (p. 77), and recalling, "strategies generally unplanned and unsystematic and may be initiated, consciously or unconsciously," (p. 78) such as "activating prior knowledge and retrieval strategies" (p. 78). All the interviewed experienced principals reviewed their experiential base when presented with a new ill-structured decision situation. Not only had their previous memories been encoded but, in comparing the newly-presented ill-structured decision situation with previous experiences, the new experience was also being encoded within their experiential base.

The Organizing Skills category was used "to arrange information so it can be understood or presented more effectively" through imposing "structure on information and experience by matching similarities, noting differences, or indicating sequence" (Marzano et al, 1988, p. 80). The four core thinking skills included within this category

were comparing, "identifying similarities and differences between or among entities" (p. 80), classifying, "grouping items into categories on the basis of their attributes" (p. 81), ordering, "sequencing or ordering entities according to a given criterion" (p. 84), and representing, "to show how critical elements are related" in "visual, verbal, and [or] symbolic" (p. 85) form. The experienced principals interviewed in this study used all four of these core thinking skills in organizing information from various sources relating to a presented ill-structured decision situation. The area superintendents and the superintendent also alluded to the well-developed organizational skills possessed by principals whom they believed to be good decision makers in ill-structured decision situations.

One of the most important categories in the sequence of core thinking skills is Analyzing Skills. These skills are used to interpret information and relationships. Marzano et al (1988, p. 91) stated that "through analysis, we identify and distinguish components, attributes, claims, assumptions, and reasons. The function of analysis is to "look inside" ideas; it is the core of critical thinking as defined by philosophers." The four core thinking skills within the Analyzing Skills category were identifying attributes and components, "to recognize and then articulate the parts that together constitute a whole" (p. 91); identifying relationships and patterns, "make distinctions among elements that constitute a whole; when identifying patterns and relationships, . . . articulate the interrelationships among these components" (p. 91); identifying main ideas, "involves identifying the hierarchy of key ideas in a message or line of reasoning; that is, the set of superordinate ideas around which a message is organized plus any key details" (p. 95); and identifying errors, "involves detecting mistakes in logic, calculations, procedures, and knowledge, and where possible, identifying their causes and making corrections or changes in thinking" (p. 97). Through their discussions, the interviewed experienced principals revealed that they possessed and

used well-developed analytical skills not only in reviewing information presented to them but also in the analysis of their understandings and cognitive operations through reflective and metacognitive processes. The area superintendents and the superintendent also emphasized that principals whom they believed to be good decision makers in ill-structured decision situations used exceptional analytical skills in identifying the real problem associated with the presented decision situation.

The Generating Skills category of core thinking skills was described by Marzano et al (1988, p. 98) as "using prior knowledge to add information beyond what is given" which "is essentially constructive, as connections among new ideas and prior knowledge are made by building a coherent organization of ideas (i.e., a schema) that holds the new and old information together." The core thinking skills associated with this category were inferring, to "go beyond available information to identify what reasonably may be true" (p. 98); predicting, "a statement anticipating the outcomes of a situation" (p. 100); and elaborating, "adding details, explanations, examples, or other relevant information from prior knowledge in order to improve understanding" (p. 101). The interviewed experienced principals used these skills in postulating alternative interpretations for the information presented by those involved in the ill-structured decision situation. They began to integrate their knowledge from their experiential base to develop strategies for the resolution of the ill-structured decision situation.

The seventh category in the sequence of core thinking skills presented by Marzano et al (1988, p. 103) was Integrating Skills, which involved "putting together the relevant parts or aspects of a solution, understanding, principle, or composition." Integrating skills are used to associate newly-presented information with the products of information gathering and an individual's knowledge base. Further understanding of the newly-presented ill-structured decision situation is promoted, and resolution

alternatives are refined. With each ill-structured decision situation, the principal is not only the individual of expertise looked to for a decision, but is also a learner in search of meaning, understanding, solution alternatives, and a resolution strategy. In describing the skills involved within the Integrating Skills category, Marzano et al (1988) explained:

> New information and prior knowledge are connected and combined as the learner [the principal] searches for prior knowledge related to incoming information, transfers that knowledge to working memory, builds meaningful connections between incoming information and prior knowledge, and incorporates this integrated information into a new understanding. (p. 103-104)

The experienced principals interviewed in this study relied heavily on their experiences and, through consultation, the experiences of others in resolving ill-structured decision situations. The core thinking skills within the Integrating Skills category were: summarizing, "combining information efficiently into a cohesive statement" involving "at least three cognitive activities--condensing information, selecting what is important (and discarding what is not), and combining original text propositions" (p. 104); and restructuring, "changing existing knowledge structures to incorporate new information" (p. 107).

The eighth and final category of core thinking skills presented by Marzano et al (1988, p. 109) is Evaluating Skills, "assessing the reasonableness and quality of ideas." The first core thinking skill within this category was establishing criteria, "setting standards for judging the value or logic of ideas. These criteria are rational principles derived from culture, experience, and instruction" (p. 109). The experienced school principals also established criteria to evaluate and remediate their own learning and functioning, and are a major component of their reflective and metacognitive activity. The second core thinking skill within this category was verifying, "confirming or proving the truth of an idea, using specific standards or criteria of evaluation" (p. 111).

The interviewed experienced principals indicated that, through their reflections on the course of action, which they had selected within an ill-structured decision situation, they evaluated their decision and took steps to verify that the desired results were being achieved.

The experienced principals interviewed within this study applied the twenty-one thinking skills in varying degrees. Their level of application may be associated with their level of proficiency with the skill or the attention or focus they give to the skill. An individual's thinking style or personality type may affect that individual's attention or focus on a thinking skill and their ultimate proficiency with that skill.

Speculation 9: The personality type of the school principal affects the decision-making processes of that individual principal.

Isaksen and Treffinger (1985) believed that an examination of personality type could provide an understanding of an individual's particular approach to problem-solving and the thinking style which that individual may use. One instrument used to assess personality type discussed by Isaksen and Treffinger (1985) was the Myer-Briggs Type Indicator.

The Myers-Briggs Type Indicator "is primarily concerned with the valuable differences in people that result from where they like to focus their attention, the way they like to take in information, the way they like to decide, and the kind of lifestyle they adopt" (Myer, 1987, p.4). The Myers-Briggs Type Indicator reports an individual's preference in perception and judgement on four scales, each represented by two opposite preferences.

The first scale, extraversion/introversion, examines how an individual prefers to focus their attention. According to Myers (1993, p. 4) "people who prefer extraversion

tend to focus on the outer world or people and the external environment. They direct their energy and attention outward and receive energy from external events, experiences, and interactions." Individuals, who prefer extraversion, are characterized by Myer (1993) as being attuned to the external environment, preferring to communicate by talking, learning best through doing or discussing, having a breath of interests, tending to speak first and reflect later, being sociable and expressive, and taking the initiative in work and relationships. Meanwhile, people who prefer introversion, are drawn to their own inner world, prefer to communicate by writing, learn best by reflection, have a depth of interest, tend to reflect before acting or speaking, are private and contained, and focus readily. Myer (1993, p. 4) believed that "people who prefer Introversion tend to focus on their own inner world of ideas and experiences. They direct their energy and attention inward and receive energy from their internal thoughts, feelings, and reflections."

The second scale, sensing/intuition, considers opposite ways in which information is perceived or acquired. The sensing individual uses senses to determine what is happening both outside and inside the individual. Myers (1993) stated that:

> People that prefer Sensing like to take in information through their eyes, ears, and other senses to find out what is actually happening. They are observant of what is going on around them and are especially good at recognizing the practical realities of a situation.(p. 4)

According to Myers (1993), individuals who prefer Sensing:

- Focus on what is real and actual
- Value practical applications
- Factual and concrete, notice details
- Observe and remember sequentially
- Present-oriented
- Want information step-by-step
- Trust experience (p. 4)

The individuals who use intuition to acquire information see relationships, meanings, and possibilities beyond what may be obtained by the senses. Myers (1993) explained:

> People who prefer Intuition like to take in information by seeing the big picture, focusing on the relationship and connections between facts. They want to grasp patterns and are especially good at seeing new possibilities and different ways of doing things. (p. 4)

Myer (1993) listed the characteristics of most people who prefer Intuition:

- Focus on "big picture," possibilities
- Value imaginative insights
- Abstract and theoretical
- See patterns and meaning in facts
- Future-oriented
- Jump around, leap in anywhere
- Trust inspiration (p. 4)

The third scale, thinking/feeling, refers to the opposite ways of using the acquired information to make decisions, judgements, and/or opinions. In describing Thinking preference, Myers (1993) stated:

> People who prefer to use Thinking in decision making tend to look at the logical consequences of a choice or action. They try to mentally remove themselves from a situation to examine it objectively and analyze cause and effect. Their goal is an objective standard of truth and the application of principles. Their strengths include figuring out what is wrong with something so they can apply their problem-solving abilities. (p. 5)

The characteristics of most of the people who prefer Thinking listed by Myers (1993) were:

- Analytical
- Logical problem solvers
- Use cause-and-effect reasoning
- "Tough-minded"
- Strive for impersonal, objective truth
- Reasonable
- Fair (p. 5)

Opposed to making decisions through thinking are individuals who prefer to make decisions through Feeling. Myers (1993) described making decisions through feeling when she stated:

> People who prefer to use Feeling in decision making tend to consider what is important to them and to other people. They mentally place themselves in a situation and identify with the people involved so that they can make decisions based on person-centered values. Their goal is harmony and recognition of individuals, and their strengths include understanding, appreciating, and supporting others. (p. 5)

The characteristics of most of the individuals who prefer Feeling, according to Myers (1993) were:

- Sympathetic
- Assess impact on people
- Guided by personal values
- "Tender-hearted"
- Strive for harmony and individual validation
- Compassionate
- Accepting (p. 5)

A principal's preference, Thinking or Feeling, may affect the decision-making process which that principal would use in resolving ill-structured decision situations.

The fourth and final scale on the Myers-Briggs Type Indicator "describes the lifestyle you adopt in dealing with the outer world or how you orient yourself in relation to it . . . a judging attitude (thinking or feeling) or a perceptive attitude (sensing or intuition)" (Myers, 1987, p. 6).

In describing those individuals who prefer a judging attitude, Myer (1993) stated:

> People who prefer to use their Judging process in the outer world tend to live in a planned, orderly way, wanting to regulate and control life. They make decisions, come to closure, and move on. Their life style is structured and organized, and they like to have things settled. Sticking to a plan and schedule is very important to them, and they enjoy their ability to get things done. (p. 5)

Myers (1993) listed the characteristics of most people who preferred Judging as:

- Scheduled
- Organized
- Systematic
- Methodical
- Plan
- Like closure--to have things decided
- Avoid last-minute stresses (p. 5)

In describing individuals, who had a natural preference for Perceiving when relating to the outer world, Myers (1993) stated:

> People who prefer to use their Perceiving process in the outer world tend to live in a flexible, spontaneous way, seeking to experience and understand life, rather than control it. Plans and decisions feel confining to them; they prefer to stay open to experience and last-minute options. They enjoy and trust their resourcefulness and ability to adapt to the demands of a situation. (p. 5)

The characteristics of most of the individuals who had a preference for Perceiving were presented by Myers (1993) as:

- Spontaneous
- Open-ended
- Casual
- Flexible
- Adapt
- Like things loose and open to change
- Feel energized by last-minute pressures (p. 5)

The manner in which principals orientate themselves to the world may affect the ways they prefer to interact with staff members, students, colleagues, and parents. Since most ill-structured decision situations involve interactions between individuals or groups of individuals, identifying preferential manner of orientation to the outer world

of the individuals involved, Judging or Perceiving, may contribute to greater understanding and the reduction of conflict.

The Myers-BriggsType Indicator is an instrument which reports an individual's preferences on four scales, each with opposite poles. According to Myer (1993), the differences among individuals is the consequence of:

- where they prefer to focus their attention (Extraversion or Introversion).
- the way they prefer to make decisions (Sensing or Intuition).
- the way they make decisions (Thinking or Feeling).
- how they orient themselves to the external world--whether they primarily use a Judging process or Perceiving process in relating to the other world (Judging or Perceiving). (p. 3)

The four-by-four matrix produces sixteen combinations of preferences identified by a four-letter code. Each of the sixteen codes and the characteristics frequently associated with each coded Type is presented in Figure 2.

	Sensing types		Intuitive Types	
Introverts	**ISTJ**	**ISFJ**	**INFJ**	**INTJ**
	Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter-of fact, logical, realistic, and dependable. See to it that everything is well organized. Take responsibility. Make up their own minds as to what should be accomplished and work toward it steadily, regardless of protests or distractions.	Quiet, friendly, responsible, and conscientious. Work devotedly to meet their obligations. Lend stability to any project or group. Thorough, painstaking, accurate. Their interests are usually not technical. Can be patient with necessary details. Loyal, considerate, perceptive, concerned with how other people feel.	Succeed by perseverance, originality, and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear visions as to how best to serve the common good.	Have original minds and great drive for their own ideas and purposes. Have long-range vision and quickly find meaningful patterns in external events. In fields that appeal to them, they have a fine power to organize a job and carry it through. Skeptical, critical, independent, determined, have high standards of competence and performance.
	ISTP	**ISFP**	**INFP**	**INTP**
	Cool onlookers—quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. Usually interested in cause and effect, how and why mechanical things work, and in organizing facts using logical principles. Excel at getting to the core of a practical problem and finding the solution.	Retiring, quietly friendly, sensitive, kind, modest about their abilities. Shun disagreements, do no force their opinions or values on others. Usually do not care to lead but are often loyal followers. Often relaxed about getting things done because they enjoy the present moment and do not want to spoil it by undue haste or exertion.	Quiet observers, idealistic, loyal. Important that outer life be congruent with inner values. Curious, quick to see possibilities, often serves as catalysts to implement ideas. Adaptable, flexible, and accepting unless a value is threatened. Want to understand people and ways of fulfilling human potential. Little concern with possessions or surroundings	Quiet and reserved. Especially enjoy theoretical or scientific pursuits. Like solving problems with logic and analysis. Interested mainly in ideas with little liking for parties or small talk. Tend to have sharply defined interests. Need careers where some strong interest can be used and useful.
	ESTP	**ESFP**	**ENFP**	**ENTP**
	Good at on-the-spot problem solving. Like action, enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. Adaptable, tolerant, pragmatic; focused on getting results. Dislike long explanations. Are best with real things that can be worked, handled, taken apart, or put together.	Outgoing, accepting, friendly, enjoy everything and make things more fun for others by their enjoyment. Like action and making things happen. Know what's going on and join in eagerly. Find remembering facts easier than mastering theories. Are best in situations that need sound common sense and practical ability with people.	Warmly enthusiastic, high-spirited, ingenious, imaginative. Able to do almost anything that interests them. Quick with a solution for any difficulty and ready to help anyone with a problem. Often rely on their ability to improvise instead of preparing in advance. Can usually find compelling reasons for whatever they want.	Quick, ingenious, good at many things. Stimulating company, alert and outspoken. May argue for fun on either side of a question. Resourceful in solving new and challenging problems, but may neglect routine assignments. Apt to turn to one new interest after another. Skillful in finding logical reasons for what they want.
Extroverts	**ESTJ**	**ESFJ**	**ENFJ**	**ENTJ**
	Practical, realistic, matter-of-fact., With a natural head for business or mechanics. Not interested in abstract theories; want learning to have direct and immediate application. Like to organize and run activities> Often make good administrators; are decisive, quickly move to implement decisions; take care of routine details.	Warm-hearted, talkative, popular, conscientious, born cooperators, active committee members. Need harmony and may be good at creating it. Always doing something nice for someone Work best with encouragement and praise. Main interest is in things that directly and visibly affect people's lives.	Responsive and responsible. Feel concern for what others think or want, and try to handle things with due regard for the other's feelings. Can present a proposal or lead a group discussion with ease and tact. Sociable, popular, sympathetic. Responsive to praise and criticism. Like to facilitate others and enable people to achieve their potential.	Frank, decisive, leaders in activities. Develop and implement comprehensive systems to solve organizational problems. Good in anything that requires reasoning and intelligent talk, such as public speaking. Are usually well informed and enjoy adding to their fund of knowledge.

Figure 2 Characteristics Frequently Associated with Each Type (Myers, 1993, p. 3)

The different types of individuals, according to their particular preferences, exhibit a variety of characteristics. These characteristics affect the manner in which they approach their particular employment situations and interact with other individuals. Figure 3a and Figure 3b identifies the Effects of Preferences in Work Situations.

Extraversion	**Introversion**
Like variety and action	Like quiet for concentration
Often impatient with long, slow jobs	Tend not to mind working on one project for a long time uninterruptedly
Are interested in the activities of their work and in how other people do it.	Are interested in the facts/ideas behind their work.
Often act quickly, sometimes without thinking	Develop ideas by discussion
Like having people around	Like working alone with no interruptions
Learn new tasks by talking and doing	Learn new tasks by reading and reflecting
Sensing	**Intuition**
Like using experience and standard ways to solve problems	Like solving new complex problems
Enjoy applying what they have already learned	Enjoy learning a new skill more than using it
May distrust and ignore their inspirations	Will follow their inspirations
Seldom make errors of fact	May ignore or overlook facts
Like to do things with a practical bent	Like to do things with an innovative bent
Like to present the details of their work first	Like to present an overview of their work first
Prefer continuation of what is, with fine tuning	Prefer change, sometimes radical, to continuation of what is
Usually proceed step-by-step	Usually proceed in bursts of energy
Thinking	**Feeling**
Use logical analysis to reach conclusions	Use values to reach conclusions
Want mutual respect among colleagues	Want harmony and support among colleagues
May hurt people's feelings without knowing it	Enjoy pleasing people, even in unimportant things
Tend to decide impersonally, sometimes paying insufficient attention to people's wishes	Often let decisions be influenced by their own and other people's likes and dislikes
Tend to be firm-minded and can give criticism when appropriate	Tend to be sympathetic and dislike, even avoid, telling people unpleasant things
Look at the principles involved in the situation	Look at the underlying values in the situation
Feel rewarded when job is done well	Feel rewarded when peoples' needs are met

Figure 3a Effects of preferences in work situations (Myers, 1993, p. 25)

Judging	Perceiving
Work best when they can plan their work and follow their plan	Enjoy flexibility in their work
Like to get things settled and finished	Like to leave things open for last minute changes
May not notice new things that need to be done	May postpone unpleasant tasks that need to be done
Tend to be satisfied once they reach a decision on a thing, situation, or person	Tend to be curious and welcome a new light on a thing, situation, or person
Reach closure by deciding quickly	Postpone decisions while searching for options
Feel supported by structure and schedules	Adapt well to changing situations and feel restricted without variety
Focus on completion of a project	Focus on the process of a project

Figure 3b Effects of preferences in work situations (Myers, 1993, p. 25)

Myers (1993) described potential negative biases which may occur through a lack of understanding of individuals with opposite preferences:

- E's [Extroverts] may think I's [Introverts] are withholding information when they are processing internally.
- I's may think E's are changing their minds when they are processing a decision verbally.
- S's [Sensors] may think N's [Intuitors] are changing the subject when they are generating possibilities.
- N's may think S's are unimaginative when they are being realistic about practical matters.
- T's [Thinkers] may think F's [Feelers] are over-personalizing when they focus on impacts on individuals.
- F's may think T's are harsh and cold when they take a detached problem-solving viewpoint.
- J's [Judgers] may think the P's [Perceivers] are lazy or procrastinating when they are trying to keep options open.
- P's may think J's are rigid and controlling when they are structuring and scheduling. (p. 24)

Awareness of the differences in individual preferences in addressing a situation may reduce the potential for conflict and misunderstanding.

Besides benefitting from the awareness of the differences in preferences among individuals, a person can also benefit from the awareness of his or her preferences and the need to address situations in a manner which may not be consistent with those preferences. Myers (1993, p. 29) believed that "To improve your ability to solve problems and make decisions, you need to learn how to use both kinds of perception (Sensing and Intuition) and both kinds of judgement (Thinking and Feeling), each for the right purpose." Reliance on preferred processes at the expense of least preferred processes may introduce certain biases which would have a negative affect on a problem solving or decision-making process. Myer (1993) maintained that:

> Intuitives may base a decision on some possibility without discovering the facts that will make it impossible. Sensing types may settle for a faulty solution to a problem because they assume no better one is possible. Thinking types may ignore human values and Feeling types may ignore consequences. (p. 29)

Myers (1993) introduced a series of questions to facilitate the use of both kinds of perception (Sensing and Intuition) and both kinds of judgement (Thinking and Feeling) in decision-making situations. These questions are presented in Figure 4.

A knowledge of preferences relating to personality type, would enhance a person's self understanding and appreciation of differences in preferences among individuals. This understanding may not only improve relationships among staff members, but may also contribute to the successful resolution of ill-structured decision situations since most of these situations involve interpersonal interactions usually under conditions of disagreement or conflict.

1. **Define the problem** by using sensing perception to see it realistically. Avoid wishful thinking.

   Sensing Questions
   What are the facts?
   What exactly is the situation?
   What have you or others done?
   What has worked or not worked?
   What are the bottom line realities?
   What are my resources?

2. **Consider all the possibilities** by using intuitive perception. Brainstorm. Don't leave out a possibility because it doesn't seem practical.

   Intuitive Questions
   What are all the possibilities?
   What might work?
   What other ways are there to look at this?
   What do the data imply?
   What are the connections to other issues or people?
   What are the patterns in the facts?

3. **Weigh the consequences of each course of action** by using thinking judgment. In a detached and impersonal way analyze the advantages and disadvantages of each alternative. Make a tentative decision about what will give the best results.

   Thinking Questions
   What are the pros and cons of each option?
   What are the logical consequences of each option?
   Is this reasonable?
   What are the consequences of not acting?
   What impact would this have on my other priorities?

4. **Weigh the alternatives looking at the impact** on the people by using feeling judgment. Use empathy to put yourself into the situation.

   Feeling Questions
   How does each alternative fit with my values?
   How will the people concerned be affected?
   How will each option contribute to harmony?
   How will I support the people with this decision?

5. **Make a final decision,** consciously, on your best course of action.

6. **Do it!** Act on your decision.

7. **Evaluate the decision.** Was it a good one? Did you consider all the facts, possibilities, impacts, and consequences? If you are satisfied, keep on. If not, rework the steps. You may have new information; the situation may have changed; you may see consequences you didn't anticipate; or your values may have changed.

Figure 4 Myers' questions to facilitate use of perception and judgement in decision-making situations (Myers, 1993, p. 29)

Speculation 10: The principal's decision-making style is influenced by the decision-making or management style of the area superintendent.

The principal's decision-making style may be influenced by the area superintendent's decision-making style and expectations. Each of the four central office respondents indicated that they could identify principals who were good decision makers in ill-structured situations. Their selection may have been biased by the degree to which the principal's decision-making style was consistent with their own style or expectations. Certain area superintendents provided their principals with a great deal of autonomy in decision making while others virtually required their principals to clear decisions with them. Consequently, one area superintendent may have viewed principals as good decision makers if they acted autonomously while another area superintendent may have viewed principals as being good decision makers if the decisions were cleared with him.

The superintendent disclosed that such differences in style had the potential to create difficulty if (1) principals who best acted autonomously were reporting to area superintendents who required direct involvement in the principal's decision making and (2) a principal who best operated under close supervision of the area superintendent was required to act autonomously. To be successful there was pressure for the principals to adapt their decision-making styles to that of the respective area superintendent. Covey (1992) described this relationship when he stated that, "The style to the staff people is strongly influenced by the style of the executive mentors" (p. 69).

Recommendations

From the analysis of the data obtained in this study, a number of recommendations for further research, theory development, and practice in Educational Administration are suggested.

Recommendations for Further Research and Theory Development

The information gained from the interview data leads to recommendations for further research which could serve to extend and augment the findings of the present study. Such research could be foundational to the development of educational administration theory. The recommendations are:

Recommendation 1: To isolate valid and reliable criteria to be used to assess the decision-making abilities of principals in resolving ill-structured decision situations.

No universally accepted valid criteria exist which may be used to distinguish principals according to their decision-making abilities in ill-structured decision situations. Since principals vary in their decision-making abilities in ill-structured decision situations, identifying and studying the characteristics and processes used by principals who are more or less talented in decision making should be beneficial. The data obtained from these studies could be used in developing an assessment instrument to be used in evaluating the strengths of school administrators. Individual principals could also use such criteria for the self-evaluation of their own decision-making processes. Area superintendents and superintendents could benefit from assessing their own decision making styles and their expectations for the principals who are responsible to them.

Research has been and continues to be conducted into assess and describes differential abilities in various domains and with various activities. Some researchers use the distinction "beginners/masters" in addressing domain-specific differences in thinking skills (Chase and Simon, 1973; Hays, 1981), while other use an expert/novice distinction (de Groot, 1965; Glaser & Chi, 1988; Larkin, McDermott, Simon, & Simon, 1980a, 1980b; Larkin, 1983; Chi, Feltovich, & Glaser, 1981; Mayer, 1979, 1985; Vessey, 1985, 1986). Leithwood and Stager (1986), who looked at the differences between the

expert and more typical principals, use the terms "expert" and "effective" synonymously. These studies may be used and extended with the objective of developing theoretical criteria to identify expertise in decision making.

Recommendation 2: To determine the extent to which the decision-making style of senior administrators affects the decision-making style and processes of the principals reporting to them.

The interview data in this study revealed that the area superintendents interviewed had different approaches and expectations regarding the amount of freedom they gave to principals in terms of decision making. Some area superintendents gave the principals reporting to them a great deal of independence in making decisions. Other area superintendents required principals to clear decisions with them before the decisions were finalized.

Principals, who require greater guidance or are reluctant to act in an independent manner, may encounter significant difficulty if assigned to an area superintendent who expects principals to decide situations on their own. Principals may also experience significant difficulty if they are conditioned to act independently but are reporting to an area superintendent who expects to be consulted before solutions are reached.

Further research into the relationships between decision-making styles of principals and area superintendents may lead to the development of criteria to be used in assigning principals to work with particular area superintendents. For example, novice principals may be required to work with area superintendents who are more personally involved with school-based decision making. Strategies could also be developed to assist principals to adjust their decision-making styles to be more consistent with the expectations of their area superintendents or to help area

superintendents to be more flexible in their approaches to the decision making styles of individual principals.

Recommendation 3: To investigate the decision making processes used by novice school principals in resolving ill-structured decision situations and to determine how to refine these processes through appropriate instruction.

A study to determine the decision-making processes used by novice principals in resolving ill-structured decision situations would be useful as a means of comparison with the processes used by experienced principals analyzed in this study and in future research. Inservice and preservice programs could subsequently be developed to give the novice principals prepared clinical experiences which would serve as means to develop and increase their experiential and knowledge bases related to ill-structured decision situations.

The present study showed that experienced school principals relied extensively on their past experiences in addressing newly emerging ill-structured decision situations. These experiences provided the experienced principal with a knowledge base which could then be used to develop information acquisition and evaluation strategies to diagnose and postulate solution alternatives.

The interviewed experienced principals believed that their decision making abilities had developed significantly from the time that they first assumed a principalship. Along with emphasizing the use of past experience in addressing decision situations, this study indicated that there was a distinction between the knowledge possessed by the novice principal who has little experience and the knowledge of one who has extensive experience and, by virtue of this experience, may be viewed as an expert. Mayer (1992) discussed four classes of knowledge which may differ in experts and novices. They are: factual or syntactic knowledge, semantic knowledge,

schematic knowledge, and strategic knowledge. Chi, Glaser, and Rees (1982) determined that "the problem-solving difficulties of novices can be attributed to inadequacies of their knowledge bases and not to limitations in the architecture of their cognitive systems or processing capabilities" (p. 71). Novices or those functioning as novices usually do not possess then same level of knowledge as the expert. According to Mayer (1992), "problem solving in a domain depends heavily on the quality and quantity of the problem solver's domain specific knowledge" (p. 413). Experts usually possess a large quantity of high-quality domain-specific knowledge. Further research into how this knowledge can best be disseminated to novice administrators would be of great value.

Recommendation 4: To include, as part of research design, a stipulation to provide research subjects, prior to beginning this study, with written descriptors, definitions, and examples of terminology which is to be used in a study but which may not be part of the subjects' working vocabulary.

Occasionally practitioners may not be adequately acquainted with the terminology associated with the theoretical and research literature within a field of study. This is particularly true when accepted theoretical terminology differs from colloquial useage. For example, in the present study, some respondents may have been confused about the meaning of the terminology "ill-structured decision situation" even though they had been given verbal definitions and descriptions during the interviews. They may have viewed the presence of ill-structured decision situations as an indicator of incompetence. During the interviews, the researcher restated his definition of the terminology, using different words, and he provided synonyms for the terminology since "the researcher who fails to determine whether his or her experimental instructions were correctly understood by the subjects is often faced with a study in ruin" (Gavelek & Raphael, 1985, p. 103.).

Synonyms for the terminology may be more easily understood, but at times, may be difficult to develop. For instance, in the present study," difficult decision situation" might have been thought of as a synonym to "ill-structured decision situation," however, in reality a "difficult decision situation" may not be "ill-structured decision situations" at all but could be "well-structured decision situation." The descriptor "difficult" arises from the unpleasantness associated with the situation rather than its lack of structure." Such clarification was essential to the outcome of the study.

If a misunderstanding regarding terminology leads a subject to believe that the research situation negatively reflects on his or her competence, the information required may not be completely revealed by the subject. Without full recognition of this crucial component of the evoked meaning of terminology used within the study, the resultant interview data could be significantly compromised.

Recommendations for Practice

The data and findings obtained from this study resulted in a number of recommendations regarding the practice of educational administration. These recommendations are:

Recommendation 1: To determine the personality type or preferences of each school based and central office administrator and to train these administrators to understand the existence and implications of different personality types.

An instrument such as the Myers-Briggs Type Indicator could be used to assess the administrator's personality type and probable preference in his or her focus of attention, manner of information acquisition, decision making style, and the type of adopted lifestyle. Administrators with good understanding of these characteristics could not only develop a better understanding of their own personality but also of the

behavior preferences of individuals with personalities which differ from their own.

Since the majority of ill-structured decision situations involve situations of conflict between or among individuals, an understanding of personality types would aid the administrator in understanding why certain individuals behave in the manner in which they do. With greater understanding, conflict within a situation may be reduced and solutions may be reached in a more collaborative manner.

Understanding of personality type may also benefit the interpersonal interactions between area superintendents and the principals. The principal may receive greater support for his decision-making style which, in turn, may lead to an increase in his self-confidence decision-making abilities. The principal may also better understand and accept the actions of his superiors.

An awareness of personality type may increase principals' understandings of interactions among staff members. Furthermore, principals may learn to better appreciate differences in personal operating preferences between themselves and members of the school staff.

Recommendation 2: To develop networks of principals to function as informal professional groups, providing peer support and opportunities to share experiences and ideas with colleagues.

Representatives from both the interviewed, experienced principals and the senior central office administrators in the present study identified the benefits which accrued to principals who were members of such a network. Area superintendents could stimulate the creation of opportunities for principals to develop peer networks. Certainly, the value of collaborative networking is currently receiving recognition within business and professional communities.

Recommendation 3: To provide training to both school based and central office administrators in methodologies which enhance creativity in decision making and problem solving.

Ill-structured decision situations are ones which require creative and innovative solutions, (Van Gundy, 1984; Newell, Shaw, & Simon, 1962). However, in the present study the practice of the subjects did not demonstrate these qualities. Not a single interviewed experienced principal revealed that he used any method which would enhance the creativity of his solution production. They relied almost exclusively on their past experiences and those of their peers. In sum, they looked to the past for their future solutions. The creativity which is required in ill-structured decision situations was not being sought or developed. No system was used to achieve levels of creativity which might, indeed, be foundational in order to resolve ill-structured decision situations.

Many strategies, techniques, and systems exist which may assist principals to develop creative solutions to ill-structured decision situations. Osborn (1953) emphasized the importance of imagination and creativity in problem solving through the principles of Differed Judgment, Quantity Breeds Quality, and Brainstorming. Gordon (1961) developed an approach called Synectics in which problems are analyzed and solutions developed by using analogies and metaphors in order to make the strange familiar or the familiar strange. Gordon (1961) proposes five psychological states required to achieve solutions: involvement and detachment, deferment, speculation, autonomy of object, and hedonic response. Osborn (1953) and Parnes (1967, 1981) first developed the Creative Problem Solving model which emphasized a balance between divergent and convergent thinking through the five steps of Fact-Finding, Problem-Finding, Idea-Finding, Solution Finding, and Acceptance-Finding. Isaksen and Treffinger (1985) developed a basic course in creative problem solving which provides

instruction in the strategies and techniques which could be used to obtain creative solutions to problem or decision-making situations. These examples are but a few of the processes and models which are available to stimulate creativity in problem solving and decision making.

Treffinger (1983), identified over seventy types of programs, strategies, and techniques which could be used to encourage creativity. Van Gundy (1981) provides guidelines for selecting and using the many available techniques and systems to make creative decisions or solutions. He lists thirteen techniques to refine and analyze problems, twenty-eight techniques for individuals and groups to generate ideas, thirteen techniques to evaluate and select ideas, three techniques to implement ideas, and thirteen miscellaneous or eclectic techniques which may be use in problem solving or decision making.

If reaching creative and innovative decisions or solutions is important, then principals and senior central office administrators need to be encouraged to become trained in the use of various methods developed to reach creative decisions and solutions.

Recommendation 4: To provide a structure for principals and their area superintendents to develop cooperative decision-making models which are sufficiently flexible to accommodate the individual decision making styles.

The interviewed area superintendents revealed that they spent little time in assisting principals with decision making. Area superintendents and their principals need to discuss their decision making styles and expectations. Procedures which will promote principals' decision making and remediate, in a positive and constructive manner, decisions which may need to be revisited need to be identified and introduced.

Recommendation 5: To provide principals with information and strategies to further develop their metacognitive functioning.

In describing their development as decision makers, the principals who were interviewed showed that they had used metacognitive activities. "Metacognition refers to cognitions about cognitions or the executive decision-making process in which the individual must both carry out cognitive operations and oversee his or her progress," (Meichenbaum, Burland, Gruson, and Cameron, 1985, p. 5). The metacognitive activities summarized by Brown (1978) showed similarities to decision-making paradigms. These metacognitive activities included:

1. Analyzing and characterizing the problem at hand;
2. Reflecting upon what one knows or does not know that may be necessary for a solution;
3. Devising a plan for attacking the problem;
4. Checking or monitoring progress.

She further summarized these activities within two categories, the first was reflection activities where one reflects upon one's cognitive abilities and the second was self regulatory activities where one used these activities while attempting to learn or solve problems. Meichenbaum, Burland, Gruson, and Cameron (1985) described these metacognitive activities as "two classes of cognitive activities: the first is one's awareness of domain specific knowledge, especially about one's own cognitive processes; the second involves content-free strategies or procedural knowledge such a self-interrogation skills, self checking, and so forth" (p. 5). A widely quoted extensive description of metacognitive processes was advanced by Flavell (1976):

> Metacognition refers to one's knowledge concerning one's own cognitive processes and products or anything related to them, e.g., the learning-relevant properties of information or data. For example, I am engaging in metacognition (metamemory, metalearning, metaattention, metalanguage, or whatever) if I notice that I am having more trouble learning A than B; if it occurs to me that I had better scrutinize each and every alternative in any multiple choice type task situation before

> deciding which is the best one; if I sense that I had better make note of D because I may forget it. . . . Metacognition refers, among other things, to the active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in the service of some concrete goal or objective. (p. 232)

During the interviews the principals provided numerous examples of their metacognitive activities. They reflected upon their experiences altering when necessary the manner in which they viewed themselves, their behaviors, and how they assessed the situation. Training principals to identify and understand the metacognitive activities and cognitive processes that they use in decision making, may enhance their comprehension of how decisions are made. A relationship may exist between the frequency, depth, and skill in metacognitive activities and the growth of expertise in decision making within ill-structured decision situations.

Concluding Remarks

Decision making is one of the most pervasive and crucial functions in educational administration. Every administrative task presents decision situations. Decision situations may range from being programmed or well-structured with recurring and routine decisions to nonprogrammed or ill-structured decision situations which involve high levels of uncertainty or conflict requiring "custom-tailored treatment" (Simon, 1960,p. 6) relying on judgement, intuition, and creativity. The present study investigated the decision making of experienced principals in ill-structured decision situations from their personal perspectives as well as from the perspectives of their superiors, the area superintendents and the superintendent.

The type of ill-structured decision situation most frequently described by the respondents involved conflict circumstances with parents regarding the behavior or discipline of their children. Such situations may tend to increase in frequency as

society places greater financial and social demands on the family and on schools. Principals may benefit from conflict-resolution training in order to be successful in resolving ill-structured decision situations.

Principals' negotiating skills may be enhanced through greater awareness of their own personal preferences and personality types and through understanding the manner in which individuals with such personality types and personal preferences, which may be different from their own, interact with the world. Procedures could be developed to assist individuals with particular personalities to interact in a positive and understanding way with individuals who function differently from themselves. The potential for significant research and development exists in such a field.

The reliance on individual and collective personal experience was significant for the experienced principals in resolving ill-structured decision situations. Mentoring programs designed to share experiences could be adapted to collectively enhance the creative abilities of the participants. Clinical experiences could also be provided to give individuals experiences in resolving ill-structured decision situations. Courses which specifically address decision making under ill-structured conditions should be considered.

The importance of the relationship between the principal and the area superintendent can not be under estimated. The principals' decision making abilities may well be either enhanced or diminished by the nature of the relationship.

The study of decision making has not been exhausted. Important concepts and relationships exist which still need to be researched and developed. Continued research and theory development in the area of decision making will benefit and empower educational administrators as they face the challenges of their daily responsibilities.

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Appendix A

Dear

I am seeking authorization to interview a number of experienced elementary or elementary/junior high school principals to complete my doctoral dissertation. I am researching the strategies and procedures used by experienced principals in resolving ill structured decisions situations.

I have enclosed a copy of the Ethics Review Application with confirmation of its approval by the Ethics Review Committee of the Department of Educational Administration. The Ethics Review Application describes the purpose, methodology, and the nature of the involvement of human participants in the proposed research. The specific procedures for observing the University of Alberta ethical guidelines for research involving human participants are also enclosed as part of the Ethics Review Application.

Thank you for considering my request.

Yours truly,

J. J (Jim) Tymo

Encl.

Appendix B

Dear

Thank you for participating in the research for my doctoral dissertation to determine the strategies and procedures used by experienced or expert principals in resolving ill structured decision situations. I have enclosed a transcript of our tape recorded interview for your review. If you wish to further clarify the meaning of any of your responses please write your comments on the transcript.

I have enclosed a stamped self addressed envelop to assist you in returning the transcript. Please return the transcript even if you have not added any comments.

Thank you once again for sharing your experience and expertise in decision making. It is my hope that the information which you have provided will contribute to the theory and practice of educational administration.

Yours truly,

J. J (Jim) Tymo

Encl.